

APPENDIX A

HEADER TRANSFERASE 02-OCT-01 1K3A
TITLE STRUCTURE OF THE INSULIN-LIKE GROWTH FACTOR 1 RECEPTOR
TITLE 2 KINASE
COMPND MOL_ID: 1;
COMPND 2 MOLECULE: INSULIN-LIKE GROWTH FACTOR 1 RECEPTOR;
COMPND 3 CHAIN: A;
COMPND 4 FRAGMENT: BETA CHAIN, KINASE DOMAIN (RESIDUES 988-1286);
COMPND 5 EC: 2.7.1.112;
COMPND 6 ENGINEERED: YES;
COMPND 7 MOL_ID: 2;
COMPND 8 MOLECULE: INSULIN RECEPTOR SUBSTRATE 1;
COMPND 9 CHAIN: B;
COMPND 10 SYNONYM: IRS-1;
COMPND 11 ENGINEERED: YES
SOURCE MOL_ID: 1;
SOURCE 2 ORGANISM_SCIENTIFIC: HOMO SAPIENS;
SOURCE 3 ORGANISM_COMMON: HUMAN;
SOURCE 4 EXPRESSION_SYSTEM: SPODOPTERA FRUGIPERDA;
SOURCE 5 EXPRESSION_SYSTEM_COMMON: FALL ARMYWORM;
SOURCE 6 EXPRESSION_SYSTEM_STRAIN: SF9;
SOURCE 7 EXPRESSION_SYSTEM_VECTOR_TYPE: BACULOVIRUS;
SOURCE 8 EXPRESSION_SYSTEM_PLASMID: PFAST-BAC;
SOURCE 9 MOL_ID: 2;
SOURCE 10 SYNTHETIC: YES;
SOURCE 11 OTHER_DETAILS: CHEMICALLY SYNTHESIZED
KEYWDS PROTEIN KINASE, TYROSINE KINASE, TYROSINE PHOSPHORYLATION,
KEYWDS 2 PROTEIN-SUBSTRATE COMPLEX
EXPDTA X-RAY DIFFRACTION
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REVDAT 1 28-NOV-01 1K3A 0
JRNL AUTH S.FAVELYUKIS,J.H.TILL,S.R.HUBBARD,W.T.MILLER
JRNL TITL STRUCTURE AND AUTOREGULATION OF THE INSULIN-LIKE
JRNL TITL 2 GROWTH FACTOR 1 RECEPTOR KINASE
JRNL REF TO BE PUBLISHED
JRNL REFN
REMARK 1
REMARK 2
REMARK 2 RESOLUTION. 2.10 ANGSTROMS.
REMARK 3
REMARK 3 REFINEMENT.
REMARK 3 PROGRAM : CNS 1.0
REMARK 3 AUTHORS : BRUNGER,ADAMS,CLORE,DELANO,GROS,GROSSE-
REMARK 3 : KUNSTLEVE,JIANG,KUSZEWSKI,NILGES, PANNU,
REMARK 3 : READ,RICE,SIMONSON,WARREN
REMARK 3
REMARK 3 REFINEMENT TARGET : ENGH & HUBER
REMARK 3
REMARK 3 DATA USED IN REFINEMENT.
REMARK 3 RESOLUTION RANGE HIGH (ANGSTROMS) : 2.10
REMARK 3 RESOLUTION RANGE LOW (ANGSTROMS) : 28.07
REMARK 3 DATA CUTOFF (SIGMA(F)) : 0.000
REMARK 3 OUTLIER CUTOFF HIGH (RMS(ABS(F))) : NULL
REMARK 3 COMPLETENESS (WORKING+TEST) (%) : 99.9
REMARK 3 NUMBER OF REFLECTIONS : 24265
REMARK 3
REMARK 3 FIT TO DATA USED IN REFINEMENT.
REMARK 3 CROSS-VALIDATION METHOD : THROUGHOUT
REMARK 3 FREE R VALUE TEST SET SELECTION : RANDOM

REMARK 3 R VALUE (WORKING SET) : 0.212
 REMARK 3 FREE R VALUE : 0.251
 REMARK 3 FREE R VALUE TEST SET SIZE (%) : 9.800
 REMARK 3 FREE R VALUE TEST SET COUNT : 2381
 REMARK 3 ESTIMATED ERROR OF FREE R VALUE : 0.005
 REMARK 3
 REMARK 3 FIT IN THE HIGHEST RESOLUTION BIN.
 REMARK 3 TOTAL NUMBER OF BINS USED : 6
 REMARK 3 BIN RESOLUTION RANGE HIGH (A) : 2.10
 REMARK 3 BIN RESOLUTION RANGE LOW (A) : 2.23
 REMARK 3 BIN COMPLETENESS (WORKING+TEST) (%) : 96.10
 REMARK 3 REFLECTIONS IN BIN (WORKING SET) : 3533
 REMARK 3 BIN R VALUE (WORKING SET) : 0.2310
 REMARK 3 BIN FREE R VALUE : 0.2750
 REMARK 3 BIN FREE R VALUE TEST SET SIZE (%) : 9.90
 REMARK 3 BIN FREE R VALUE TEST SET COUNT : 390
 REMARK 3 ESTIMATED ERROR OF BIN FREE R VALUE : 0.014
 REMARK 3
 REMARK 3 NUMBER OF NON-HYDROGEN ATOMS USED IN REFINEMENT.
 REMARK 3 PROTEIN ATOMS : 2359
 REMARK 3 NUCLEIC ACID ATOMS : 0
 REMARK 3 HETEROGEN ATOMS : 31
 REMARK 3 SOLVENT ATOMS : 158
 REMARK 3
 REMARK 3 B VALUES.
 REMARK 3 FROM WILSON PLOT (A**2) : 22.30
 REMARK 3 MEAN B VALUE (OVERALL, A**2) : 33.90
 REMARK 3 OVERALL ANISOTROPIC B VALUE.
 REMARK 3 B11 (A**2) : 2.00000
 REMARK 3 B22 (A**2) : 3.88000
 REMARK 3 B33 (A**2) : -5.88000
 REMARK 3 B12 (A**2) : 0.00000
 REMARK 3 B13 (A**2) : 0.00000
 REMARK 3 B23 (A**2) : 0.00000
 REMARK 3
 REMARK 3 ESTIMATED COORDINATE ERROR.
 REMARK 3 ESD FROM LUZZATI PLOT (A) : 0.25
 REMARK 3 ESD FROM SIGMAA (A) : 0.15
 REMARK 3 LOW RESOLUTION CUTOFF (A) : 5.00
 REMARK 3
 REMARK 3 CROSS-VALIDATED ESTIMATED COORDINATE ERROR.
 REMARK 3 ESD FROM C-V LUZZATI PLOT (A) : 0.31
 REMARK 3 ESD FROM C-V SIGMAA (A) : 0.21
 REMARK 3
 REMARK 3 RMS DEVIATIONS FROM IDEAL VALUES.
 REMARK 3 BOND LENGTHS (A) : 0.006
 REMARK 3 BOND ANGLES (DEGREES) : 1.30
 REMARK 3 DIHEDRAL ANGLES (DEGREES) : 22.00
 REMARK 3 IMPROPER ANGLES (DEGREES) : 0.71
 REMARK 3
 REMARK 3 ISOTROPIC THERMAL MODEL : RESTRAINED
 REMARK 3
 REMARK 3 ISOTROPIC THERMAL FACTOR RESTRAINTS. RMS SIGMA
 REMARK 3 MAIN-CHAIN BOND (A**2) : 0.990 ; 1.500
 REMARK 3 MAIN-CHAIN ANGLE (A**2) : 1.680 ; 2.000
 REMARK 3 SIDE-CHAIN BOND (A**2) : 5.110 ; 2.000
 REMARK 3 SIDE-CHAIN ANGLE (A**2) : 6.690 ; 2.500
 REMARK 3
 REMARK 3 BULK SOLVENT MODELING.
 REMARK 3 METHOD USED : FLAT MODEL

REMARK 3 KSOL : 0.36
 REMARK 3 BSOL : 46.82
 REMARK 3
 REMARK 3 NCS MODEL : NULL
 REMARK 3
 REMARK 3 NCS RESTRAINTS. RMS SIGMA/WEIGHT
 REMARK 3 GROUP 1 POSITIONAL (A) : NULL ; NULL
 REMARK 3 GROUP 1 B-FACTOR (A**2) : NULL ; NULL
 REMARK 3
 REMARK 3 PARAMETER FILE 1 : PROTEIN_REP.PARAM
 REMARK 3 PARAMETER FILE 2 : DNA-RNA.PARAM
 REMARK 3 PARAMETER FILE 3 : WATER_REP.PARAM
 REMARK 3 PARAMETER FILE 4 : ION.PARAM
 REMARK 3 PARAMETER FILE 5 : PARAMCSDX.MISC
 REMARK 3 PARAMETER FILE 6 : NULL
 REMARK 3 TOPOLOGY FILE 1 : &_1_TOPOLOGY_INFILE_1
 REMARK 3 TOPOLOGY FILE 2 : &_1_TOPOLOGY_INFILE_2
 REMARK 3 TOPOLOGY FILE 3 : &_1_TOPOLOGY_INFILE_3
 REMARK 3 TOPOLOGY FILE 4 : &_1_TOPOLOGY_INFILE_4
 REMARK 3 TOPOLOGY FILE 5 : &_1_TOPOLOGY_INFILE_5
 REMARK 3 TOPOLOGY FILE 6 : NULL
 REMARK 3
 REMARK 3 OTHER REFINEMENT REMARKS: NULL
 REMARK 4
 REMARK 4 1K3A COMPLIES WITH FORMAT V. 2.3, 09-JULY-1998
 REMARK 100
 REMARK 100 THIS ENTRY HAS BEEN PROCESSED BY RCSB ON 12-OCT-2001.
 REMARK 100 THE RCSB ID CODE IS RCSB014506.
 REMARK 200
 REMARK 200 EXPERIMENTAL DETAILS
 REMARK 200 EXPERIMENT TYPE : X-RAY DIFFRACTION
 REMARK 200 DATE OF DATA COLLECTION : 22-MAY-2001
 REMARK 200 TEMPERATURE (KELVIN) : 100.0
 REMARK 200 PH : 7.50
 REMARK 200 NUMBER OF CRYSTALS USED : 1
 REMARK 200
 REMARK 200 SYNCHROTRON (Y/N) : Y
 REMARK 200 RADIATION SOURCE : NSLS
 REMARK 200 BEAMLINE : X4A
 REMARK 200 X-RAY GENERATOR MODEL : NULL
 REMARK 200 MONOCHROMATIC OR LAUE (M/L) : M
 REMARK 200 WAVELENGTH OR RANGE (A) : 0.97250
 REMARK 200 MONOCHROMATOR : SILICON CRYSTAL
 REMARK 200 OPTICS : NULL
 REMARK 200
 REMARK 200 DETECTOR TYPE : CCD
 REMARK 200 DETECTOR MANUFACTURER : ADSC QUANTUM 4
 REMARK 200 INTENSITY-INTEGRATION SOFTWARE : DENZO
 REMARK 200 DATA SCALING SOFTWARE : SCALEPACK
 REMARK 200
 REMARK 200 NUMBER OF UNIQUE REFLECTIONS : 24941
 REMARK 200 RESOLUTION RANGE HIGH (A) : 2.100
 REMARK 200 RESOLUTION RANGE LOW (A) : 28.070
 REMARK 200 REJECTION CRITERIA (SIGMA(I)) : 0.000
 REMARK 200
 REMARK 200 OVERALL.
 REMARK 200 COMPLETENESS FOR RANGE (%) : 99.9
 REMARK 200 DATA REDUNDANCY : NULL
 REMARK 200 R MERGE (I) : NULL
 REMARK 200 R SYM (I) : 0.04800

REMARK 200 <I/SIGMA(I)> FOR THE DATA SET : NULL
 REMARK 200
 REMARK 200 IN THE HIGHEST RESOLUTION SHELL.
 REMARK 200 HIGHEST RESOLUTION SHELL, RANGE HIGH (A) : 2.10
 REMARK 200 HIGHEST RESOLUTION SHELL, RANGE LOW (A) : 2.18
 REMARK 200 COMPLETENESS FOR SHELL (%) : 100.0
 REMARK 200 DATA REDUNDANCY IN SHELL : NULL
 REMARK 200 R MERGE FOR SHELL (I) : NULL
 REMARK 200 R SYM FOR SHELL (I) : 0.25400
 REMARK 200 <I/SIGMA(I)> FOR SHELL : NULL
 REMARK 200
 REMARK 200 DIFFRACTION PROTOCOL: SINGLE WAVELENGTH
 REMARK 200 METHOD USED TO DETERMINE THE STRUCTURE: MOLECULAR REPLACEMENT
 REMARK 200 SOFTWARE USED: AMORE
 REMARK 200 STARTING MODEL: 1IR3
 REMARK 200
 REMARK 200 REMARK: NULL
 REMARK 280
 REMARK 280 CRYSTAL
 REMARK 280 SOLVENT CONTENT, VS (%): NULL
 REMARK 280 MATTHEWS COEFFICIENT, VM (ANGSTROMS**3/DA): NULL
 REMARK 280
 REMARK 280 CRYSTALLIZATION CONDITIONS: PEG 8000, SODIUM CHLORIDE, HEPES
 REMARK 290
 REMARK 290 CRYSTALLOGRAPHIC SYMMETRY
 REMARK 290 SYMMETRY OPERATORS FOR SPACE GROUP: C 2 2 21
 REMARK 290

REMARK 290	SYMOP	SYMMETRY
REMARK 290	NNNMMM	OPERATOR
REMARK 290	1555	X, Y, Z
REMARK 290	2555	-X, -Y, 1/2+Z
REMARK 290	3555	-X, Y, 1/2-Z
REMARK 290	4555	X, -Y, -Z
REMARK 290	5555	1/2+X, 1/2+Y, Z
REMARK 290	6555	1/2-X, 1/2-Y, 1/2+Z
REMARK 290	7555	1/2-X, 1/2+Y, 1/2-Z
REMARK 290	8555	1/2+X, 1/2-Y, -Z

 REMARK 290
 REMARK 290 WHERE NNN -> OPERATOR NUMBER
 REMARK 290 MMM -> TRANSLATION VECTOR
 REMARK 290
 REMARK 290 CRYSTALLOGRAPHIC SYMMETRY TRANSFORMATIONS
 REMARK 290 THE FOLLOWING TRANSFORMATIONS OPERATE ON THE ATOM/HETATM
 REMARK 290 RECORDS IN THIS ENTRY TO PRODUCE CRYSTALLOGRAPHICALLY
 REMARK 290 RELATED MOLECULES.

REMARK 290	SMTRY1	1	1.000000	0.000000	0.000000	0.000000
REMARK 290	SMTRY2	1	0.000000	1.000000	0.000000	0.000000
REMARK 290	SMTRY3	1	0.000000	0.000000	1.000000	0.000000
REMARK 290	SMTRY1	2	-1.000000	0.000000	0.000000	0.000000
REMARK 290	SMTRY2	2	0.000000	-1.000000	0.000000	0.000000
REMARK 290	SMTRY3	2	0.000000	0.000000	1.000000	46.64850
REMARK 290	SMTRY1	3	-1.000000	0.000000	0.000000	0.000000
REMARK 290	SMTRY2	3	0.000000	1.000000	0.000000	0.000000
REMARK 290	SMTRY3	3	0.000000	0.000000	-1.000000	46.64850
REMARK 290	SMTRY1	4	1.000000	0.000000	0.000000	0.000000
REMARK 290	SMTRY2	4	0.000000	-1.000000	0.000000	0.000000
REMARK 290	SMTRY3	4	0.000000	0.000000	-1.000000	0.000000
REMARK 290	SMTRY1	5	1.000000	0.000000	0.000000	40.31200
REMARK 290	SMTRY2	5	0.000000	1.000000	0.000000	55.50900
REMARK 290	SMTRY3	5	0.000000	0.000000	1.000000	0.000000

REMARK 290 SMTRY1 6 -1.000000 0.000000 0.000000 40.31200
REMARK 290 SMTRY2 6 0.000000 -1.000000 0.000000 55.50900
REMARK 290 SMTRY3 6 0.000000 0.000000 1.000000 46.64850
REMARK 290 SMTRY1 7 -1.000000 0.000000 0.000000 40.31200
REMARK 290 SMTRY2 7 0.000000 1.000000 0.000000 55.50900
REMARK 290 SMTRY3 7 0.000000 0.000000 -1.000000 46.64850
REMARK 290 SMTRY1 8 1.000000 0.000000 0.000000 40.31200
REMARK 290 SMTRY2 8 0.000000 -1.000000 0.000000 55.50900
REMARK 290 SMTRY3 8 0.000000 0.000000 -1.000000 0.00000
REMARK 290
REMARK 290 REMARK: NULL
REMARK 300
REMARK 300 BIOMOLECULE: 1
REMARK 300 THIS ENTRY CONTAINS THE CRYSTALLOGRAPHIC ASYMMETRIC UNIT
REMARK 300 WHICH CONSISTS OF 2 CHAIN(S). SEE REMARK 350 FOR
REMARK 300 INFORMATION ON GENERATING THE BIOLOGICAL MOLECULE(S).
REMARK 350
REMARK 350 GENERATING THE BIOMOLECULE
REMARK 350 COORDINATES FOR A COMPLETE MULTIMER REPRESENTING THE KNOWN
REMARK 350 BIOLOGICALLY SIGNIFICANT OLIGOMERIZATION STATE OF THE
REMARK 350 MOLECULE CAN BE GENERATED BY APPLYING BIOMT TRANSFORMATIONS
REMARK 350 GIVEN BELOW. BOTH NON-CRYSTALLOGRAPHIC AND
REMARK 350 CRYSTALLOGRAPHIC OPERATIONS ARE GIVEN.
REMARK 350
REMARK 350 BIOMOLECULE: 1
REMARK 350 APPLY THE FOLLOWING TO CHAINS: A, B
REMARK 350 BIOMT1 1 1.000000 0.000000 0.000000 0.00000
REMARK 350 BIOMT2 1 0.000000 1.000000 0.000000 0.00000
REMARK 350 BIOMT3 1 0.000000 0.000000 1.000000 0.00000
REMARK 465
REMARK 465 MISSING RESIDUES
REMARK 465 THE FOLLOWING RESIDUES WERE NOT LOCATED IN THE
REMARK 465 EXPERIMENT. (M=MODEL NUMBER; RES=RESIDUE NAME; C=CHAIN
REMARK 465 IDENTIFIER; SSSEQ=SEQUENCE NUMBER; I=INSERTION CODE.)
REMARK 465
REMARK 465 M RES C SSSEQI
REMARK 465 GLU A 1069
REMARK 465 ASN A 1070
REMARK 465 ASN A 1071
REMARK 465 PRO A 1072
REMARK 465 VAL A 1073
REMARK 465 LEU A 1074
REMARK 465 ALA A 1075
REMARK 465 PRO A 1076
REMARK 465 LYS B 1
REMARK 465 LYS B 2
REMARK 465 LYS B 3
REMARK 465 SER B 4
REMARK 465 PRO B 5
REMARK 465 GLY B 14
REMARK 470
REMARK 470 MISSING ATOM
REMARK 470 THE FOLLOWING RESIDUES HAVE MISSING ATOMS (M=MODEL NUMBER;
REMARK 470 RES=RESIDUE NAME; C=CHAIN IDENTIFIER; SSEQ=SEQUENCE NUMBER;
REMARK 470 I=INSERTION CODE):
REMARK 470 M RES CSSEQI ATOMS
REMARK 470 LYS A 993 CG CD CE NZ
REMARK 470 ASN A1006 CG OD1 ND2
REMARK 470 GLU A1007 CG CD OE1 OE2
REMARK 470 ARG A1012 CG CD NE CZ NH1 NH2

REMARK 470 GLU A1067 CB CG CD OE1 OE2
REMARK 470 MET A1068 CB CG SD CE
REMARK 470 LEU A1079 CG CD1 CD2
REMARK 470 LYS A1081 CG CD CE NZ
REMARK 470 GLU A1132 CG CD OE1 OE2
REMARK 470 LYS A1224 CG CD CE NZ
REMARK 470 GLU A1238 CG CD OE1 OE2
REMARK 470 LYS A1256 CG CD CE NZ
REMARK 500
REMARK 500 GEOMETRY AND STEREOCHEMISTRY
REMARK 500 SUBTOPIC: COVALENT BOND LENGTHS
REMARK 500
REMARK 500 THE STEREOCHEMICAL PARAMETERS OF THE FOLLOWING RESIDUES
REMARK 500 HAVE VALUES WHICH DEVIATE FROM EXPECTED VALUES BY MORE
REMARK 500 THAN 6*RMSD (M=MODEL NUMBER; RES=RESIDUE NAME; C=CHAIN
REMARK 500 IDENTIFIER; SSEQ=SEQUENCE NUMBER; I=INSERTION CODE).
REMARK 500
REMARK 500 STANDARD TABLE:
REMARK 500 FORMAT: (10X,I3,1X,2(A3,1X,A1,I4,A1,1X,A4,3X),F6.3)
REMARK 500
REMARK 500 EXPECTED VALUES: ENGH AND HUBER, 1991
REMARK 500
REMARK 500 M RES CSSEQI ATM1 RES CSSEQI ATM2 DEVIATION
REMARK 500 MET A1126 CE MET A1126 SD 0.049
REMARK 500 MET A1217 SD MET A1217 CG 0.034
REMARK 500 GLY B 6 CA GLY B 6 N 0.039
REMARK 500
REMARK 500 GEOMETRY AND STEREOCHEMISTRY
REMARK 500 SUBTOPIC: COVALENT BOND ANGLES
REMARK 500
REMARK 500 THE STEREOCHEMICAL PARAMETERS OF THE FOLLOWING RESIDUES
REMARK 500 HAVE VALUES WHICH DEVIATE FROM EXPECTED VALUES BY MORE
REMARK 500 THAN 6*RMSD (M=MODEL NUMBER; RES=RESIDUE NAME; C=CHAIN
REMARK 500 IDENTIFIER; SSEQ=SEQUENCE NUMBER; I=INSERTION CODE).
REMARK 500
REMARK 500 STANDARD TABLE:
REMARK 500 FORMAT: (10X,I3,1X,A3,1X,A1,I4,A1,3(1X,A4,2X),12X,F5.1)
REMARK 500
REMARK 500 EXPECTED VALUES: ENGH AND HUBER, 1991
REMARK 500
REMARK 500 M RES CSSEQI ATM1 ATM2 ATM3
REMARK 500 GLU A 985 N - CA - C ANGL. DEV. = -8.8 DEGREES
REMARK 500 ALA A1001 N - CA - C ANGL. DEV. = -10.3 DEGREES
REMARK 500 ARG A1034 N - CA - C ANGL. DEV. = 8.7 DEGREES
REMARK 500 VAL A1047 N - CA - C ANGL. DEV. = -8.5 DEGREES
REMARK 500 VAL A1102 N - CA - C ANGL. DEV. = -8.3 DEGREES
REMARK 500 GLY A1122 N - CA - C ANGL. DEV. = 12.4 DEGREES
REMARK 500 THR A1133 N - CA - C ANGL. DEV. = 8.1 DEGREES
REMARK 500 GLU A1180 N - CA - C ANGL. DEV. = -9.5 DEGREES
REMARK 999
REMARK 999 SEQUENCE
REMARK 999 THE RESIDUE CORRESPONDS TO RESIDUE FROM
REMARK 999 A SYNTHETIC PEPTIDE. IT WAS ADDED TO
REMARK 999 MODIFY THE SEQUENCE TO BE SUITABLE FOR
REMARK 999 ACTIVITY ASSAYS
DBREF 1K3A A 958 1256 SWS P08069 IG1R_HUMAN 988 1286
DBREF 1K3A B 3 14 SWS P35568 IRS1_HUMAN 891 902
SEQADV 1K3A PTR A 1131 SWS P08069 TYR 1161 MODIFIED RESIDUE
SEQADV 1K3A PTR A 1135 SWS P08069 TYR 1165 MODIFIED RESIDUE
SEQADV 1K3A PTR A 1136 SWS P08069 TYR 1166 MODIFIED RESIDUE

SEQADV 1K3A LEU A 1212 SWS P08069 PHE 1242 VARIANT
 SEQADV 1K3A LYS B 1 SWS P08069 SEE REMARK 999
 SEQADV 1K3A LYS B 2 SWS P08069 SEE REMARK 999
 SEQRES 1 A 299 VAL PRO ASP GLU TRP GLU VAL ALA ARG GLU LYS ILE THR
 SEQRES 2 A 299 MET SER ARG GLU LEU GLY GLN GLY SER PHE GLY MET VAL
 SEQRES 3 A 299 TYR GLU GLY VAL ALA LYS GLY VAL VAL LYS ASP GLU PRO
 SEQRES 4 A 299 GLU THR ARG VAL ALA ILE LYS THR VAL ASN GLU ALA ALA
 SEQRES 5 A 299 SER MET ARG GLU ARG ILE GLU PHE LEU ASN GLU ALA SER
 SEQRES 6 A 299 VAL MET LYS GLU PHE ASN CYS HIS HIS VAL VAL ARG LEU
 SEQRES 7 A 299 LEU GLY VAL VAL SER GLN GLY GLN PRO THR LEU VAL ILE
 SEQRES 8 A 299 MET GLU LEU MET THR ARG GLY ASP LEU LYS SER TYR LEU
 SEQRES 9 A 299 ARG SER LEU ARG PRO GLU MET GLU ASN ASN PRO VAL LEU
 SEQRES 10 A 299 ALA PRO PRO SER LEU SER LYS MET ILE GLN MET ALA GLY
 SEQRES 11 A 299 GLU ILE ALA ASP GLY MET ALA TYR LEU ASN ALA ASN LYS
 SEQRES 12 A 299 PHE VAL HIS ARG ASP LEU ALA ALA ARG ASN CYS MET VAL
 SEQRES 13 A 299 ALA GLU ASP PHE THR VAL LYS ILE GLY ASP PHE GLY MET
 SEQRES 14 A 299 THR ARG ASP ILE PTR GLU THR ASP PTR PTR ARG LYS GLY
 SEQRES 15 A 299 GLY LYS GLY LEU LEU PRO VAL ARG TRP MET SER PRO GLU
 SEQRES 16 A 299 SER LEU LYS ASP GLY VAL PHE THR THR TYR SER ASP VAL
 SEQRES 17 A 299 TRP SER PHE GLY VAL VAL LEU TRP GLU ILE ALA THR LEU
 SEQRES 18 A 299 ALA GLU GLN PRO TYR GLN GLY LEU SER ASN GLU GLN VAL
 SEQRES 19 A 299 LEU ARG PHE VAL MET GLU GLY GLY LEU LEU ASP LYS PRO
 SEQRES 20 A 299 ASP ASN CYS PRO ASP MET LEU LEU GLU LEU MET ARG MET
 SEQRES 21 A 299 CYS TRP GLN TYR ASN PRO LYS MET ARG PRO SER PHE LEU
 SEQRES 22 A 299 GLU ILE ILE SER SER ILE LYS GLU GLU MET GLU PRO GLY
 SEQRES 23 A 299 PHE ARG GLU VAL SER PHE TYR TYR SER GLU GLU ASN LYS
 SEQRES 1 B 14 LYS LYS LYS SER PRO GLY GLU TYR VAL ASN ILE GLU PHE
 SEQRES 2 B 14 GLY
 MODRES 1K3A PTR A 1131 TYR O-PHOSPHOTYROSINE
 MODRES 1K3A PTR A 1135 TYR O-PHOSPHOTYROSINE
 MODRES 1K3A PTR A 1136 TYR O-PHOSPHOTYROSINE
 HET PTR A1131 16
 HET PTR A1135 16
 HET PTR A1136 16
 HET ACP 300 31
 HETNAM PTR O-PHOSPHOTYROSINE
 HETNAM ACP PHOSPHOMETHYLPHOSPHONIC ACID ADENYLATE ESTER
 HETSYN PTR PHOSPHONOTYROSINE
 HETSYN ACP ADENOSINE-5'-[BETA, GAMMA-METHYLENE]TRIPHOSPHATE
 FORMUL 1 PTR 3(C9 H12 N1 O6 P1)
 FORMUL 3 ACP C11 H18 N5 O12 P3
 FORMUL 4 HOH *158(H2 O1)
 HELIX 1 1 ALA A 965 GLU A 967 5
 3
 HELIX 2 2 SER A 1010 LYS A 1025 1
 16
 HELIX 3 3 ASP A 1056 SER A 1063 1
 8
 HELIX 4 4 SER A 1078 ASN A 1099 1
 22
 HELIX 5 5 ALA A 1107 ARG A 1109 5
 3
 HELIX 6 6 PRO A 1145 MET A 1149 5
 5
 HELIX 7 7 SER A 1150 GLY A 1157 1
 8
 HELIX 8 8 THR A 1160 THR A 1177 1
 18
 HELIX 9 9 SER A 1187 GLU A 1197 1
 11

[illegible]

C									
ATOM	15	N	ASP	A	960	6.746	18.269	65.954	1.00 44.87
N									
ATOM	16	CA	ASP	A	960	7.511	18.796	64.836	1.00 43.06
C									
ATOM	17	C	ASP	A	960	7.304	17.778	63.718	1.00 41.33
C									
ATOM	18	O	ASP	A	960	7.752	16.635	63.819	1.00 41.18
O									
ATOM	19	CB	ASP	A	960	8.986	18.876	65.223	1.00 44.41
C									
ATOM	20	CG	ASP	A	960	9.857	19.411	64.110	1.00 45.65
C									
ATOM	21	OD1	ASP	A	960	11.083	19.504	64.324	1.00 45.96
O									
ATOM	22	OD2	ASP	A	960	9.321	19.739	63.029	1.00 46.57
O									
ATOM	23	N	GLU	A	961	6.621	18.193	62.657	1.00 38.80
N									
ATOM	24	CA	GLU	A	961	6.329	17.299	61.544	1.00 36.15
C									
ATOM	25	C	GLU	A	961	7.550	16.803	60.784	1.00 34.19
C									
ATOM	26	O	GLU	A	961	7.470	15.797	60.087	1.00 33.48
O									
ATOM	27	CB	GLU	A	961	5.377	17.979	60.559	1.00 37.39
C									
ATOM	28	CG	GLU	A	961	5.955	19.231	59.949	1.00 37.84
C									
ATOM	29	CD	GLU	A	961	5.185	19.701	58.741	1.00 38.43
C									
ATOM	30	OE1	GLU	A	961	4.860	18.858	57.877	1.00 39.58
O									
ATOM	31	OE2	GLU	A	961	4.921	20.916	58.645	1.00 36.87
O									
ATOM	32	N	TRP	A	962	8.674	17.500	60.908	1.00 32.23
N									
ATOM	33	CA	TRP	A	962	9.882	17.091	60.198	1.00 31.38
C									
ATOM	34	C	TRP	A	962	10.838	16.206	60.990	1.00 31.67
C									
ATOM	35	O	TRP	A	962	11.694	15.540	60.408	1.00 32.08
O									
ATOM	36	CB	TRP	A	962	10.635	18.319	59.687	1.00 30.26
C									
ATOM	37	CG	TRP	A	962	9.909	19.018	58.585	1.00 28.44
C									
ATOM	38	CD1	TRP	A	962	9.198	20.174	58.679	1.00 28.49
C									
ATOM	39	CD2	TRP	A	962	9.791	18.580	57.227	1.00 27.71
C									
ATOM	40	NE1	TRP	A	962	8.639	20.487	57.461	1.00 28.76
N									
ATOM	41	CE2	TRP	A	962	8.989	19.525	56.552	1.00 28.16
C									
ATOM	42	CE3	TRP	A	962	10.289	17.478	56.514	1.00 27.97
C									
ATOM	43	CZ2	TRP	A	962	8.670	19.406	55.196	1.00 28.47
C									
ATOM	44	CZ3	TRP	A	962	9.974	17.358	55.165	1.00 28.60

C									
ATOM	45	CH2	TRP	A	962	9.171	18.318	54.519	1.00 28.84
C									
ATOM	46	N	GLU	A	963	10.692	16.196	62.310	1.00 31.75
N									
ATOM	47	CA	GLU	A	963	11.551	15.397	63.180	1.00 32.28
C									
ATOM	48	C	GLU	A	963	11.201	13.914	63.100	1.00 32.12
C									
ATOM	49	O	GLU	A	963	10.031	13.548	63.155	1.00 32.21
O									
ATOM	50	CB	GLU	A	963	11.407	15.871	64.630	1.00 33.07
C									
ATOM	51	CG	GLU	A	963	12.423	15.282	65.602	1.00 34.64
C									
ATOM	52	CD	GLU	A	963	13.843	15.759	65.322	1.00 35.13
C									
ATOM	53	OE1	GLU	A	963	14.015	16.957	65.035	1.00 34.62
O									
ATOM	54	OE2	GLU	A	963	14.786	14.944	65.401	1.00 36.29
O									
ATOM	55	N	VAL	A	964	12.212	13.062	62.967	1.00 31.49
N									
ATOM	56	CA	VAL	A	964	11.972	11.625	62.908	1.00 31.57
C									
ATOM	57	C	VAL	A	964	12.844	10.916	63.947	1.00 31.83
C									
ATOM	58	O	VAL	A	964	14.001	11.286	64.162	1.00 30.49
O									
ATOM	59	CB	VAL	A	964	12.272	11.029	61.493	1.00 31.63
C									
ATOM	60	CG1	VAL	A	964	11.712	11.932	60.407	1.00 31.96
C									
ATOM	61	CG2	VAL	A	964	13.751	10.823	61.305	1.00 32.42
C									
ATOM	62	N	ALA	A	965	12.281	9.900	64.596	1.00 32.42
N									
ATOM	63	CA	ALA	A	965	13.013	9.142	65.603	1.00 33.36
C									
ATOM	64	C	ALA	A	965	14.172	8.419	64.924	1.00 33.60
C									
ATOM	65	O	ALA	A	965	13.985	7.746	63.913	1.00 34.41
O									
ATOM	66	CB	ALA	A	965	12.083	8.136	66.285	1.00 34.27
C									
ATOM	67	N	ARG	A	966	15.370	8.564	65.481	1.00 33.82
N									
ATOM	68	CA	ARG	A	966	16.561	7.935	64.922	1.00 34.27
C									
ATOM	69	C	ARG	A	966	16.383	6.440	64.638	1.00 35.21
C									
ATOM	70	O	ARG	A	966	16.951	5.906	63.683	1.00 34.68
O									
ATOM	71	CB	ARG	A	966	17.744	8.137	65.872	1.00 33.86
C									
ATOM	72	CG	ARG	A	966	19.074	7.617	65.340	1.00 34.14
C									
ATOM	73	CD	ARG	A	966	20.191	7.910	66.319	1.00 34.37
C									
ATOM	74	NE	ARG	A	966	20.358	9.346	66.548	1.00 33.10

N									
ATOM	75	CZ	ARG	A	966	20.989	10.167	65.718	1.00 33.10
C									
ATOM	76	NH1	ARG	A	966	21.522	9.698	64.599	1.00 33.28
N									
ATOM	77	NH2	ARG	A	966	21.086	11.460	66.004	1.00 31.88
N									
ATOM	78	N	GLU	A	967	15.590	5.769	65.465	1.00 36.46
N									
ATOM	79	CA	GLU	A	967	15.367	4.335	65.311	1.00 38.05
C									
ATOM	80	C	GLU	A	967	14.702	3.945	63.999	1.00 37.79
C									
ATOM	81	O	GLU	A	967	14.895	2.831	63.518	1.00 37.62
O									
ATOM	82	CB	GLU	A	967	14.534	3.799	66.481	1.00 39.72
C									
ATOM	83	CG	GLU	A	967	15.186	4.009	67.837	1.00 43.28
C									
ATOM	84	CD	GLU	A	967	15.189	5.468	68.267	1.00 45.34
C									
ATOM	85	OE1	GLU	A	967	15.988	5.828	69.163	1.00 47.06
O									
ATOM	86	OE2	GLU	A	967	14.384	6.251	67.719	1.00 45.65
O									
ATOM	87	N	LYS	A	968	13.925	4.854	63.420	1.00 37.65
N									
ATOM	88	CA	LYS	A	968	13.234	4.563	62.164	1.00 38.34
C									
ATOM	89	C	LYS	A	968	14.100	4.682	60.914	1.00 37.66
C									
ATOM	90	O	LYS	A	968	13.614	4.479	59.801	1.00 37.20
O									
ATOM	91	CB	LYS	A	968	12.011	5.468	62.020	1.00 38.85
C									
ATOM	92	CG	LYS	A	968	10.955	5.242	63.091	1.00 41.18
C									
ATOM	93	CD	LYS	A	968	9.842	6.269	62.982	1.00 42.35
C									
ATOM	94	CE	LYS	A	968	8.866	6.158	64.142	1.00 44.13
C									
ATOM	95	NZ	LYS	A	968	7.876	7.279	64.136	1.00 45.27
N									
ATOM	96	N	ILE	A	969	15.377	5.007	61.094	1.00 37.96
N									
ATOM	97	CA	ILE	A	969	16.301	5.156	59.971	1.00 37.66
C									
ATOM	98	C	ILE	A	969	17.453	4.159	60.067	1.00 38.02
C									
ATOM	99	O	ILE	A	969	18.046	3.996	61.129	1.00 38.38
O									
ATOM	100	CB	ILE	A	969	16.897	6.597	59.918	1.00 38.15
C									
ATOM	101	CG1	ILE	A	969	15.826	7.605	59.491	1.00 38.62
C									
ATOM	102	CG2	ILE	A	969	18.056	6.659	58.935	1.00 37.39
C									
ATOM	103	CD1	ILE	A	969	14.737	7.817	60.507	1.00 40.32
C									
ATOM	104	N	THR	A	970	17.767	3.496	58.956	1.00 37.97

N								
ATOM	105	CA	THR A 970	18.865	2.530	58.921	1.00	38.62
C								
ATOM	106	C	THR A 970	19.811	2.866	57.773	1.00	38.86
C								
ATOM	107	O	THR A 970	19.368	3.223	56.683	1.00	37.49
O								
ATOM	108	CB	THR A 970	18.349	1.086	58.727	1.00	39.25
C								
ATOM	109	OG1	THR A 970	17.629	0.997	57.493	1.00	39.66
O								
ATOM	110	CG2	THR A 970	17.424	0.687	59.871	1.00	39.57
C								
ATOM	111	N	MET A 971	21.113	2.753	58.022	1.00	40.35
N								
ATOM	112	CA	MET A 971	22.114	3.049	57.005	1.00	42.42
C								
ATOM	113	C	MET A 971	22.703	1.779	56.392	1.00	42.91
C								
ATOM	114	O	MET A 971	23.467	1.056	57.032	1.00	43.50
O								
ATOM	115	CB	MET A 971	23.225	3.917	57.601	1.00	44.50
C								
ATOM	116	CG	MET A 971	22.723	5.271	58.108	1.00	48.53
C								
ATOM	117	SD	MET A 971	23.991	6.326	58.857	1.00	53.04
S								
ATOM	118	CE	MET A 971	23.855	5.859	60.583	1.00	52.56
C								
ATOM	119	N	SER A 972	22.339	1.522	55.140	1.00	42.76
N								
ATOM	120	CA	SER A 972	22.794	0.344	54.410	1.00	42.00
C								
ATOM	121	C	SER A 972	24.245	0.440	53.958	1.00	42.00
C								
ATOM	122	O	SER A 972	25.031	-0.479	54.182	1.00	42.88
O								
ATOM	123	CB	SER A 972	21.903	0.120	53.192	1.00	41.59
C								
ATOM	124	OG	SER A 972	20.536	0.149	53.558	1.00	40.07
O								
ATOM	125	N	ARG A 973	24.608	1.547	53.323	1.00	41.35
N								
ATOM	126	CA	ARG A 973	25.973	1.707	52.849	1.00	40.60
C								
ATOM	127	C	ARG A 973	26.315	3.167	52.584	1.00	40.77
C								
ATOM	128	O	ARG A 973	25.434	4.029	52.558	1.00	40.69
O								
ATOM	129	CB	ARG A 973	26.174	0.886	51.571	1.00	40.64
C								
ATOM	130	CG	ARG A 973	25.340	1.360	50.393	1.00	41.00
C								
ATOM	131	CD	ARG A 973	25.292	0.318	49.280	1.00	41.18
C								
ATOM	132	NE	ARG A 973	24.550	0.799	48.118	1.00	40.75
N								
ATOM	133	CZ	ARG A 973	25.023	1.684	47.246	1.00	41.48
C								
ATOM	134	NH1	ARG A 973	26.242	2.183	47.399	1.00	41.63

N									
ATOM	135	NH2	ARG	A	973	24.273	2.077	46.225	1.00 41.21
N									
ATOM	136	N	GLU	A	974	27.600	3.438	52.387	1.00 40.00
N									
ATOM	137	CA	GLU	A	974	28.053	4.795	52.122	1.00 40.68
C									
ATOM	138	C	GLU	A	974	27.873	5.141	50.651	1.00 40.66
C									
ATOM	139	O	GLU	A	974	28.006	4.281	49.781	1.00 39.97
O									
ATOM	140	CB	GLU	A	974	29.531	4.953	52.483	1.00 40.54
C									
ATOM	141	CG	GLU	A	974	29.936	4.327	53.800	1.00 41.79
C									
ATOM	142	CD	GLU	A	974	31.352	4.701	54.202	1.00 43.69
C									
ATOM	143	OE1	GLU	A	974	32.164	5.011	53.303	1.00 44.22
O									
ATOM	144	OE2	GLU	A	974	31.655	4.675	55.417	1.00 44.24
O									
ATOM	145	N	LEU	A	975	27.572	6.408	50.381	1.00 40.52
N									
ATOM	146	CA	LEU	A	975	27.398	6.885	49.016	1.00 40.32
C									
ATOM	147	C	LEU	A	975	28.586	7.760	48.656	1.00 41.01
C									
ATOM	148	O	LEU	A	975	29.071	7.733	47.525	1.00 41.29
O									
ATOM	149	CB	LEU	A	975	26.104	7.693	48.886	1.00 39.38
C									
ATOM	150	CG	LEU	A	975	24.799	6.896	48.896	1.00 38.21
C									
ATOM	151	CD1	LEU	A	975	23.611	7.840	48.828	1.00 37.29
C									
ATOM	152	CD2	LEU	A	975	24.790	5.944	47.713	1.00 38.39
C									
ATOM	153	N	GLY	A	976	29.052	8.534	49.631	1.00 41.22
N									
ATOM	154	CA	GLY	A	976	30.187	9.410	49.402	1.00 41.29
C									
ATOM	155	C	GLY	A	976	30.262	10.540	50.413	1.00 41.93
C									
ATOM	156	O	GLY	A	976	29.277	10.850	51.095	1.00 41.26
O									
ATOM	157	N	GLN	A	977	31.432	11.160	50.509	1.00 41.62
N									
ATOM	158	CA	GLN	A	977	31.643	12.260	51.444	1.00 42.16
C									
ATOM	159	C	GLN	A	977	30.937	13.524	50.956	1.00 42.04
C									
ATOM	160	O	GLN	A	977	31.020	13.868	49.775	1.00 41.71
O									
ATOM	161	CB	GLN	A	977	33.141	12.540	51.599	1.00 42.98
C									
ATOM	162	CG	GLN	A	977	33.478	13.479	52.749	1.00 44.48
C									
ATOM	163	CD	GLN	A	977	33.309	12.823	54.112	1.00 45.05
C									
ATOM	164	OE1	GLN	A	977	33.205	13.503	55.134	1.00 46.30

O									
ATOM	165	NE2	GLN	A	977	33.293	11.498	54.132	1.00 45.57
N									
ATOM	166	N	GLY	A	978	30.245	14.210	51.866	1.00 41.93
N									
ATOM	167	CA	GLY	A	978	29.541	15.431	51.504	1.00 42.28
C									
ATOM	168	C	GLY	A	978	30.184	16.700	52.048	1.00 42.84
C									
ATOM	169	O	GLY	A	978	31.322	16.681	52.515	1.00 41.43
O									
ATOM	170	N	SER	A	979	29.454	17.813	51.987	1.00 43.33
N									
ATOM	171	CA	SER	A	979	29.958	19.093	52.484	1.00 43.50
C									
ATOM	172	C	SER	A	979	30.268	19.080	53.971	1.00 43.21
C									
ATOM	173	O	SER	A	979	31.335	19.535	54.384	1.00 43.12
O									
ATOM	174	CB	SER	A	979	28.953	20.211	52.217	1.00 43.90
C									
ATOM	175	OG	SER	A	979	28.965	20.588	50.856	1.00 44.70
O									
ATOM	176	N	PHE	A	980	29.338	18.562	54.771	1.00 42.89
N									
ATOM	177	CA	PHE	A	980	29.519	18.531	56.222	1.00 42.39
C									
ATOM	178	C	PHE	A	980	29.767	17.141	56.813	1.00 40.83
C									
ATOM	179	O	PHE	A	980	30.003	17.005	58.017	1.00 40.68
O									
ATOM	180	CB	PHE	A	980	28.300	19.156	56.921	1.00 43.82
C									
ATOM	181	CG	PHE	A	980	27.806	20.426	56.281	1.00 44.33
C									
ATOM	182	CD1	PHE	A	980	26.983	20.379	55.159	1.00 44.33
C									
ATOM	183	CD2	PHE	A	980	28.171	21.668	56.791	1.00 44.40
C									
ATOM	184	CE1	PHE	A	980	26.530	21.554	54.554	1.00 44.99
C									
ATOM	185	CE2	PHE	A	980	27.724	22.845	56.194	1.00 44.26
C									
ATOM	186	CZ	PHE	A	980	26.903	22.787	55.074	1.00 44.30
C									
ATOM	187	N	GLY	A	981	29.714	16.110	55.977	1.00 39.45
N									
ATOM	188	CA	GLY	A	981	29.929	14.764	56.475	1.00 37.15
C									
ATOM	189	C	GLY	A	981	29.562	13.686	55.470	1.00 36.28
C									
ATOM	190	O	GLY	A	981	29.126	13.976	54.355	1.00 35.30
O									
ATOM	191	N	MET	A	982	29.739	12.436	55.880	1.00 34.55
N									
ATOM	192	CA	MET	A	982	29.449	11.291	55.033	1.00 35.08
C									
ATOM	193	C	MET	A	982	27.967	11.149	54.704	1.00 34.10
C									
ATOM	194	O	MET	A	982	27.105	11.301	55.578	1.00 33.48

O								
ATOM	195	CB	MET A 982	29.942	10.011	55.715	1.00	36.21
C								
ATOM	196	CG	MET A 982	29.634	8.720	54.956	1.00	38.11
C								
ATOM	197	SD	MET A 982	30.444	8.608	53.343	1.00	41.33
S								
ATOM	198	CE	MET A 982	32.134	8.320	53.845	1.00	40.06
C								
ATOM	199	N	VAL A 983	27.685	10.859	53.435	1.00	32.54
N								
ATOM	200	CA	VAL A 983	26.320	10.647	52.964	1.00	31.45
C								
ATOM	201	C	VAL A 983	26.132	9.139	52.773	1.00	31.57
C								
ATOM	202	O	VAL A 983	26.961	8.483	52.140	1.00	31.63
O								
ATOM	203	CB	VAL A 983	26.066	11.336	51.611	1.00	30.70
C								
ATOM	204	CG1	VAL A 983	24.605	11.156	51.208	1.00	30.44
C								
ATOM	205	CG2	VAL A 983	26.425	12.808	51.697	1.00	30.70
C								
ATOM	206	N	TYR A 984	25.047	8.595	53.315	1.00	31.70
N								
ATOM	207	CA	TYR A 984	24.771	7.164	53.210	1.00	32.41
C								
ATOM	208	C	TYR A 984	23.450	6.882	52.510	1.00	32.54
C								
ATOM	209	O	TYR A 984	22.579	7.748	52.441	1.00	32.44
O								
ATOM	210	CB	TYR A 984	24.658	6.532	54.597	1.00	33.06
C								
ATOM	211	CG	TYR A 984	25.831	6.732	55.519	1.00	36.00
C								
ATOM	212	CD1	TYR A 984	26.921	5.862	55.499	1.00	36.89
C								
ATOM	213	CD2	TYR A 984	25.827	7.764	56.457	1.00	36.24
C								
ATOM	214	CE1	TYR A 984	27.976	6.011	56.403	1.00	38.07
C								
ATOM	215	CE2	TYR A 984	26.870	7.923	57.359	1.00	38.11
C								
ATOM	216	CZ	TYR A 984	27.937	7.043	57.331	1.00	38.31
C								
ATOM	217	OH	TYR A 984	28.947	7.191	58.251	1.00	40.27
O								
ATOM	218	N	GLU A 985	23.310	5.663	51.993	1.00	31.06
N								
ATOM	219	CA	GLU A 985	22.060	5.241	51.383	1.00	30.67
C								
ATOM	220	C	GLU A 985	21.442	4.380	52.469	1.00	29.63
C								
ATOM	221	O	GLU A 985	22.153	3.648	53.156	1.00	29.69
O								
ATOM	222	CB	GLU A 985	22.271	4.375	50.144	1.00	31.31
C								
ATOM	223	CG	GLU A 985	20.945	4.045	49.462	1.00	33.99
C								
ATOM	224	CD	GLU A 985	21.046	2.920	48.449	1.00	34.56

C								
ATOM	225	OE1	GLU A 985	21.997	2.922	47.642	1.00	34.97
O								
ATOM	226	OE2	GLU A 985	20.159	2.039	48.456	1.00	35.98
O								
ATOM	227	N	GLY A 986	20.131	4.460	52.634	1.00	28.39
N								
ATOM	228	CA	GLY A 986	19.496	3.669	53.666	1.00	27.98
C								
ATOM	229	C	GLY A 986	18.004	3.549	53.472	1.00	28.55
C								
ATOM	230	O	GLY A 986	17.493	3.719	52.362	1.00	27.70
O								
ATOM	231	N	VAL A 987	17.307	3.260	54.568	1.00	28.71
N								
ATOM	232	CA	VAL A 987	15.861	3.096	54.565	1.00	29.21
C								
ATOM	233	C	VAL A 987	15.253	3.807	55.772	1.00	30.19
C								
ATOM	234	O	VAL A 987	15.840	3.815	56.854	1.00	29.93
O								
ATOM	235	CB	VAL A 987	15.491	1.597	54.627	1.00	29.24
C								
ATOM	236	CG1	VAL A 987	13.995	1.428	54.856	1.00	29.21
C								
ATOM	237	CG2	VAL A 987	15.922	0.908	53.341	1.00	28.19
C								
ATOM	238	N	ALA A 988	14.079	4.400	55.582	1.00	32.14
N								
ATOM	239	CA	ALA A 988	13.392	5.102	56.658	1.00	33.84
C								
ATOM	240	C	ALA A 988	11.932	4.667	56.717	1.00	35.57
C								
ATOM	241	O	ALA A 988	11.296	4.487	55.684	1.00	36.23
O								
ATOM	242	CB	ALA A 988	13.482	6.605	56.438	1.00	33.15
C								
ATOM	243	N	LYS A 989	11.405	4.502	57.927	1.00	37.47
N								
ATOM	244	CA	LYS A 989	10.016	4.087	58.110	1.00	39.73
C								
ATOM	245	C	LYS A 989	9.055	5.244	58.382	1.00	40.95
C								
ATOM	246	O	LYS A 989	9.371	6.177	59.123	1.00	41.21
O								
ATOM	247	CB	LYS A 989	9.909	3.082	59.260	1.00	40.71
C								
ATOM	248	CG	LYS A 989	10.467	1.702	58.950	1.00	42.22
C								
ATOM	249	CD	LYS A 989	10.319	0.785	60.155	1.00	43.91
C								
ATOM	250	CE	LYS A 989	10.635	-0.662	59.800	1.00	45.22
C								
ATOM	251	NZ	LYS A 989	11.999	-0.809	59.218	1.00	45.44
N								
ATOM	252	N	GLY A 990	7.879	5.165	57.770	1.00	41.88
N								
ATOM	253	CA	GLY A 990	6.853	6.175	57.956	1.00	43.74
C								
ATOM	254	C	GLY A 990	7.153	7.618	57.587	1.00	44.47

C									
ATOM	255	O	GLY A 990	6.676	8.527	58.264	1.00	45.15	
O									
ATOM	256	N	VAL A 991	7.922	7.853	56.529	1.00	44.93	
N									
ATOM	257	CA	VAL A 991	8.216	9.229	56.136	1.00	45.75	
C									
ATOM	258	C	VAL A 991	7.382	9.646	54.933	1.00	46.91	
C									
ATOM	259	O	VAL A 991	7.274	10.834	54.622	1.00	46.90	
O									
ATOM	260	CB	VAL A 991	9.715	9.436	55.811	1.00	45.26	
C									
ATOM	261	CG1	VAL A 991	10.539	9.290	57.080	1.00	44.24	
C									
ATOM	262	CG2	VAL A 991	10.168	8.444	54.748	1.00	44.41	
C									
ATOM	263	N	VAL A 992	6.795	8.665	54.258	1.00	47.70	
N									
ATOM	264	CA	VAL A 992	5.949	8.937	53.105	1.00	49.09	
C									
ATOM	265	C	VAL A 992	4.592	8.293	53.344	1.00	49.93	
C									
ATOM	266	O	VAL A 992	4.509	7.180	53.857	1.00	49.76	
O									
ATOM	267	CB	VAL A 992	6.563	8.375	51.806	1.00	49.34	
C									
ATOM	268	CG1	VAL A 992	5.590	8.550	50.648	1.00	49.21	
C									
ATOM	269	CG2	VAL A 992	7.871	9.092	51.503	1.00	49.10	
C									
ATOM	270	N	LYS A 993	3.532	9.002	52.974	1.00	51.29	
N									
ATOM	271	CA	LYS A 993	2.171	8.507	53.153	1.00	52.83	
C									
ATOM	272	C	LYS A 993	1.943	7.189	52.424	1.00	53.65	
C									
ATOM	273	O	LYS A 993	2.507	6.953	51.357	1.00	54.07	
O									
ATOM	274	CB	LYS A 993	1.163	9.545	52.653	1.00	51.97	
C									
ATOM	275	N	ASP A 994	1.112	6.333	53.010	1.00	54.94	
N									
ATOM	276	CA	ASP A 994	0.786	5.042	52.412	1.00	55.97	
C									
ATOM	277	C	ASP A 994	2.040	4.267	52.034	1.00	55.80	
C									
ATOM	278	O	ASP A 994	2.005	3.410	51.149	1.00	56.16	
O									
ATOM	279	CB	ASP A 994	-0.069	5.249	51.159	1.00	57.48	
C									
ATOM	280	CG	ASP A 994	-1.325	6.051	51.435	1.00	59.05	
C									
ATOM	281	OD1	ASP A 994	-2.045	6.372	50.463	1.00	60.59	
O									
ATOM	282	OD2	ASP A 994	-1.592	6.358	52.618	1.00	59.61	
O									
ATOM	283	N	GLU A 995	3.147	4.566	52.702	1.00	55.41	
N									
ATOM	284	CA	GLU A 995	4.403	3.893	52.404	1.00	54.70	

C									
ATOM	285	C	GLU	A	995	5.076	3.466	53.706	1.00 54.06
C									
ATOM	286	O	GLU	A	995	5.589	4.302	54.451	1.00 54.34
O									
ATOM	287	CB	GLU	A	995	5.304	4.841	51.606	1.00 55.09
C									
ATOM	288	CG	GLU	A	995	6.446	4.174	50.865	1.00 55.71
C									
ATOM	289	CD	GLU	A	995	7.075	5.092	49.824	1.00 56.21
C									
ATOM	290	OE1	GLU	A	995	6.359	5.511	48.888	1.00 56.04
O									
ATOM	291	OE2	GLU	A	995	8.281	5.397	49.941	1.00 55.75
O									
ATOM	292	N	PRO	A	996	5.069	2.151	54.002	1.00 53.12
N									
ATOM	293	CA	PRO	A	996	5.674	1.594	55.219	1.00 51.72
C									
ATOM	294	C	PRO	A	996	7.099	2.092	55.421	1.00 50.02
C									
ATOM	295	O	PRO	A	996	7.408	2.740	56.423	1.00 50.22
O									
ATOM	296	CB	PRO	A	996	5.616	0.088	54.971	1.00 51.90
C									
ATOM	297	CG	PRO	A	996	4.364	-0.061	54.169	1.00 52.61
C									
ATOM	298	CD	PRO	A	996	4.482	1.078	53.178	1.00 53.04
C									
ATOM	299	N	GLU	A	997	7.963	1.783	54.462	1.00 47.90
N									
ATOM	300	CA	GLU	A	997	9.351	2.214	54.522	1.00 45.91
C									
ATOM	301	C	GLU	A	997	9.720	2.860	53.191	1.00 43.19
C									
ATOM	302	O	GLU	A	997	9.071	2.611	52.178	1.00 43.01
O									
ATOM	303	CB	GLU	A	997	10.265	1.023	54.817	1.00 47.52
C									
ATOM	304	CG	GLU	A	997	10.274	-0.047	53.742	1.00 49.68
C									
ATOM	305	CD	GLU	A	997	11.183	-1.212	54.099	1.00 51.52
C									
ATOM	306	OE1	GLU	A	997	11.441	-2.064	53.219	1.00 51.66
O									
ATOM	307	OE2	GLU	A	997	11.635	-1.274	55.265	1.00 52.37
O									
ATOM	308	N	THR	A	998	10.759	3.688	53.194	1.00 40.04
N									
ATOM	309	CA	THR	A	998	11.183	4.383	51.983	1.00 36.94
C									
ATOM	310	C	THR	A	998	12.705	4.402	51.848	1.00 35.09
C									
ATOM	311	O	THR	A	998	13.419	4.554	52.834	1.00 34.34
O									
ATOM	312	CB	THR	A	998	10.679	5.852	51.993	1.00 36.96
C									
ATOM	313	OG1	THR	A	998	9.257	5.876	52.193	1.00 35.71
O									
ATOM	314	CG2	THR	A	998	11.024	6.557	50.678	1.00 35.95

C									
ATOM	315	N	ARG A 999	13.195	4.241	50.623	1.00	33.08	
N									
ATOM	316	CA	ARG A 999	14.628	4.282	50.375	1.00	31.04	
C									
ATOM	317	C	ARG A 999	15.019	5.748	50.472	1.00	30.15	
C									
ATOM	318	O	ARG A 999	14.330	6.619	49.938	1.00	30.07	
O									
ATOM	319	CB	ARG A 999	14.951	3.734	48.991	1.00	30.92	
C									
ATOM	320	CG	ARG A 999	14.590	2.259	48.825	1.00	30.29	
C									
ATOM	321	CD	ARG A 999	15.050	1.751	47.479	1.00	28.63	
C									
ATOM	322	NE	ARG A 999	16.503	1.802	47.337	1.00	26.75	
N									
ATOM	323	CZ	ARG A 999	17.137	1.633	46.180	1.00	27.18	
C									
ATOM	324	NH1	ARG A 999	16.437	1.405	45.074	1.00	27.39	
N									
ATOM	325	NH2	ARG A 999	18.463	1.702	46.122	1.00	26.05	
N									
ATOM	326	N	VAL A1000	16.123	6.026	51.148	1.00	28.18	
N									
ATOM	327	CA	VAL A1000	16.531	7.403	51.335	1.00	26.85	
C									
ATOM	328	C	VAL A1000	18.030	7.618	51.271	1.00	26.53	
C									
ATOM	329	O	VAL A1000	18.820	6.676	51.341	1.00	25.04	
O									
ATOM	330	CB	VAL A1000	16.056	7.918	52.714	1.00	25.84	
C									
ATOM	331	CG1	VAL A1000	14.544	7.838	52.816	1.00	25.72	
C									
ATOM	332	CG2	VAL A1000	16.701	7.081	53.824	1.00	26.38	
C									
ATOM	333	N	ALA A1001	18.401	8.885	51.129	1.00	25.56	
N									
ATOM	334	CA	ALA A1001	19.788	9.293	51.131	1.00	26.45	
C									
ATOM	335	C	ALA A1001	19.913	9.884	52.537	1.00	27.13	
C									
ATOM	336	O	ALA A1001	19.026	10.607	52.992	1.00	28.04	
O									
ATOM	337	CB	ALA A1001	20.035	10.355	50.069	1.00	26.46	
C									
ATOM	338	N	ILE A1002	20.994	9.575	53.235	1.00	27.93	
N									
ATOM	339	CA	ILE A1002	21.163	10.076	54.594	1.00	28.34	
C									
ATOM	340	C	ILE A1002	22.404	10.941	54.690	1.00	28.81	
C									
ATOM	341	O	ILE A1002	23.526	10.434	54.632	1.00	28.83	
O									
ATOM	342	CB	ILE A1002	21.282	8.913	55.604	1.00	28.26	
C									
ATOM	343	CG1	ILE A1002	20.051	8.012	55.499	1.00	27.61	
C									
ATOM	344	CG2	ILE A1002	21.418	9.460	57.022	1.00	28.65	

C									
ATOM	345	CD1	ILE	A1002	20.205	6.670	56.181	1.00	28.21
C									
ATOM	346	N	LYS	A1003	22.193	12.247	54.829	1.00	27.96
N									
ATOM	347	CA	LYS	A1003	23.292	13.195	54.952	1.00	29.44
C									
ATOM	348	C	LYS	A1003	23.563	13.427	56.433	1.00	29.61
C									
ATOM	349	O	LYS	A1003	22.646	13.722	57.201	1.00	28.96
O									
ATOM	350	CB	LYS	A1003	22.925	14.514	54.280	1.00	30.74
C									
ATOM	351	CG	LYS	A1003	22.380	14.347	52.869	1.00	33.46
C									
ATOM	352	CD	LYS	A1003	22.359	15.669	52.130	1.00	35.48
C									
ATOM	353	CE	LYS	A1003	23.769	16.215	51.972	1.00	36.55
C									
ATOM	354	NZ	LYS	A1003	23.797	17.520	51.249	1.00	37.55
N									
ATOM	355	N	THR	A1004	24.824	13.299	56.829	1.00	29.25
N									
ATOM	356	CA	THR	A1004	25.199	13.476	58.225	1.00	31.12
C									
ATOM	357	C	THR	A1004	26.189	14.623	58.442	1.00	33.55
C									
ATOM	358	O	THR	A1004	26.832	15.105	57.505	1.00	32.47
O									
ATOM	359	CB	THR	A1004	25.858	12.198	58.780	1.00	30.01
C									
ATOM	360	OG1	THR	A1004	27.206	12.118	58.303	1.00	27.44
O									
ATOM	361	CG2	THR	A1004	25.110	10.963	58.310	1.00	28.47
C									
ATOM	362	N	VAL	A1005	26.302	15.053	59.696	1.00	36.03
N									
ATOM	363	CA	VAL	A1005	27.241	16.102	60.068	1.00	38.67
C									
ATOM	364	C	VAL	A1005	28.238	15.463	61.029	1.00	40.30
C									
ATOM	365	O	VAL	A1005	27.836	14.841	62.010	1.00	41.08
O									
ATOM	366	CB	VAL	A1005	26.560	17.261	60.815	1.00	39.07
C									
ATOM	367	CG1	VAL	A1005	27.571	18.364	61.095	1.00	38.86
C									
ATOM	368	CG2	VAL	A1005	25.423	17.796	60.007	1.00	39.63
C									
ATOM	369	N	ASN	A1006	29.529	15.612	60.746	1.00	42.46
N									
ATOM	370	CA	ASN	A1006	30.560	15.050	61.612	1.00	44.36
C									
ATOM	371	C	ASN	A1006	30.299	15.509	63.048	1.00	45.44
C									
ATOM	372	O	ASN	A1006	30.086	16.698	63.300	1.00	46.18
O									
ATOM	373	CB	ASN	A1006	31.946	15.516	61.158	1.00	44.37
C									
ATOM	374	N	GLU	A1007	30.310	14.565	63.984	1.00	45.88

N									
ATOM	375	CA	GLU A1007	30.067	14.876	65.388	1.00	46.50	
C									
ATOM	376	C	GLU A1007	31.098	15.867	65.918	1.00	46.58	
C									
ATOM	377	O	GLU A1007	30.961	16.390	67.028	1.00	47.16	
O									
ATOM	378	CB	GLU A1007	30.110	13.594	66.224	1.00	47.14	
C									
ATOM	379	N	ALA A1008	32.128	16.120	65.117	1.00	45.76	
N									
ATOM	380	CA	ALA A1008	33.187	17.043	65.498	1.00	44.89	
C									
ATOM	381	C	ALA A1008	33.037	18.395	64.811	1.00	44.18	
C									
ATOM	382	O	ALA A1008	33.836	19.304	65.038	1.00	44.39	
O									
ATOM	383	CB	ALA A1008	34.542	16.439	65.163	1.00	45.31	
C									
ATOM	384	N	ALA A1009	32.015	18.528	63.972	1.00	42.56	
N									
ATOM	385	CA	ALA A1009	31.782	19.776	63.253	1.00	40.75	
C									
ATOM	386	C	ALA A1009	31.551	20.937	64.211	1.00	39.88	
C									
ATOM	387	O	ALA A1009	31.125	20.743	65.351	1.00	39.38	
O									
ATOM	388	CB	ALA A1009	30.582	19.627	62.322	1.00	41.33	
C									
ATOM	389	N	SER A1010	31.832	22.144	63.735	1.00	38.35	
N									
ATOM	390	CA	SER A1010	31.659	23.348	64.538	1.00	37.55	
C									
ATOM	391	C	SER A1010	30.210	23.804	64.520	1.00	36.97	
C									
ATOM	392	O	SER A1010	29.409	23.342	63.707	1.00	35.60	
O									
ATOM	393	CB	SER A1010	32.535	24.475	63.992	1.00	37.35	
C									
ATOM	394	OG	SER A1010	32.130	24.842	62.684	1.00	37.89	
O									
ATOM	395	N	MET A1011	29.883	24.719	65.425	1.00	36.72	
N									
ATOM	396	CA	MET A1011	28.540	25.263	65.505	1.00	36.44	
C									
ATOM	397	C	MET A1011	28.231	25.935	64.175	1.00	35.51	
C									
ATOM	398	O	MET A1011	27.119	25.824	63.647	1.00	34.89	
O									
ATOM	399	CB	MET A1011	28.458	26.284	66.642	1.00	38.74	
C									
ATOM	400	CG	MET A1011	27.121	26.996	66.749	1.00	39.78	
C									
ATOM	401	SD	MET A1011	27.083	28.091	68.184	1.00	43.32	
S									
ATOM	402	CE	MET A1011	26.780	26.880	69.449	1.00	40.68	
C									
ATOM	403	N	ARG A1012	29.227	26.631	63.635	1.00	33.97	
N									
ATOM	404	CA	ARG A1012	29.073	27.317	62.359	1.00	33.88	

C									
ATOM	405	C	ARG	A1012	28.614	26.351	61.265	1.00	33.25
C									
ATOM	406	O	ARG	A1012	27.675	26.637	60.525	1.00	31.65
O									
ATOM	407	CB	ARG	A1012	30.399	27.963	61.941	1.00	34.27
C									
ATOM	408	N	GLU	A1013	29.286	25.210	61.170	1.00	33.17
N									
ATOM	409	CA	GLU	A1013	28.952	24.211	60.166	1.00	34.41
C									
ATOM	410	C	GLU	A1013	27.591	23.582	60.428	1.00	33.95
C									
ATOM	411	O	GLU	A1013	26.789	23.404	59.504	1.00	34.15
O									
ATOM	412	CB	GLU	A1013	30.039	23.134	60.121	1.00	35.87
C									
ATOM	413	CG	GLU	A1013	31.376	23.674	59.634	1.00	40.38
C									
ATOM	414	CD	GLU	A1013	32.504	22.669	59.750	1.00	43.12
C									
ATOM	415	OE1	GLU	A1013	32.845	22.274	60.888	1.00	44.34
O									
ATOM	416	OE2	GLU	A1013	33.052	22.275	58.698	1.00	45.74
O									
ATOM	417	N	ARG	A1014	27.329	23.247	61.687	1.00	33.08
N									
ATOM	418	CA	ARG	A1014	26.056	22.646	62.052	1.00	31.81
C									
ATOM	419	C	ARG	A1014	24.908	23.582	61.709	1.00	29.76
C									
ATOM	420	O	ARG	A1014	23.851	23.141	61.263	1.00	28.31
O									
ATOM	421	CB	ARG	A1014	26.041	22.280	63.544	1.00	33.29
C									
ATOM	422	CG	ARG	A1014	26.353	20.805	63.784	1.00	36.77
C									
ATOM	423	CD	ARG	A1014	26.325	20.391	65.254	1.00	37.69
C									
ATOM	424	NE	ARG	A1014	27.518	20.821	65.979	1.00	39.41
N									
ATOM	425	CZ	ARG	A1014	27.577	21.883	66.776	1.00	40.59
C									
ATOM	426	NH1	ARG	A1014	26.504	22.642	66.966	1.00	40.66
N									
ATOM	427	NH2	ARG	A1014	28.716	22.189	67.384	1.00	41.03
N									
ATOM	428	N	ILE	A1015	25.115	24.877	61.911	1.00	28.79
N									
ATOM	429	CA	ILE	A1015	24.083	25.856	61.595	1.00	28.64
C									
ATOM	430	C	ILE	A1015	23.818	25.888	60.083	1.00	28.72
C									
ATOM	431	O	ILE	A1015	22.666	25.889	59.647	1.00	29.03
O									
ATOM	432	CB	ILE	A1015	24.489	27.268	62.090	1.00	28.51
C									
ATOM	433	CG1	ILE	A1015	24.441	27.306	63.623	1.00	29.00
C									
ATOM	434	CG2	ILE	A1015	23.572	28.330	61.483	1.00	28.32

C									
ATOM	435	CD1	ILE	A1015	24.747	28.671	64.224	1.00	29.26
C									
ATOM	436	N	GLU	A1016	24.882	25.914	59.283	1.00	28.77
N									
ATOM	437	CA	GLU	A1016	24.731	25.929	57.828	1.00	29.65
C									
ATOM	438	C	GLU	A1016	24.030	24.654	57.365	1.00	28.59
C									
ATOM	439	O	GLU	A1016	23.146	24.688	56.513	1.00	28.32
O									
ATOM	440	CB	GLU	A1016	26.101	26.038	57.150	1.00	30.99
C									
ATOM	441	CG	GLU	A1016	26.725	27.424	57.230	1.00	34.54
C									
ATOM	442	CD	GLU	A1016	28.135	27.457	56.662	1.00	37.56
C									
ATOM	443	OE1	GLU	A1016	28.673	28.570	56.480	1.00	38.68
O									
ATOM	444	OE2	GLU	A1016	28.707	26.369	56.405	1.00	37.28
O									
ATOM	445	N	PHE	A1017	24.430	23.525	57.933	1.00	28.67
N									
ATOM	446	CA	PHE	A1017	23.816	22.253	57.577	1.00	28.83
C									
ATOM	447	C	PHE	A1017	22.305	22.284	57.822	1.00	28.43
C									
ATOM	448	O	PHE	A1017	21.509	21.950	56.939	1.00	28.30
O									
ATOM	449	CB	PHE	A1017	24.427	21.135	58.407	1.00	29.50
C									
ATOM	450	CG	PHE	A1017	23.870	19.780	58.098	1.00	30.85
C									
ATOM	451	CD1	PHE	A1017	24.367	19.036	57.034	1.00	31.10
C									
ATOM	452	CD2	PHE	A1017	22.865	19.232	58.890	1.00	30.55
C									
ATOM	453	CE1	PHE	A1017	23.879	17.760	56.767	1.00	32.40
C									
ATOM	454	CE2	PHE	A1017	22.372	17.961	58.632	1.00	32.09
C									
ATOM	455	CZ	PHE	A1017	22.881	17.221	57.567	1.00	32.24
C									
ATOM	456	N	LEU	A1018	21.914	22.687	59.028	1.00	27.78
N									
ATOM	457	CA	LEU	A1018	20.506	22.741	59.395	1.00	28.40
C									
ATOM	458	C	LEU	A1018	19.736	23.815	58.633	1.00	28.48
C									
ATOM	459	O	LEU	A1018	18.550	23.635	58.333	1.00	28.25
O									
ATOM	460	CB	LEU	A1018	20.360	22.945	60.910	1.00	28.52
C									
ATOM	461	CG	LEU	A1018	20.819	21.755	61.772	1.00	28.64
C									
ATOM	462	CD1	LEU	A1018	20.736	22.106	63.258	1.00	29.37
C									
ATOM	463	CD2	LEU	A1018	19.946	20.547	61.474	1.00	28.69
C									
ATOM	464	N	ASN	A1019	20.399	24.925	58.315	1.00	27.61

N									
ATOM	465	CA	ASN A1019	19.738	25.992	57.565	1.00	28.10	
C									
ATOM	466	C	ASN A1019	19.342	25.482	56.180	1.00	27.59	
C									
ATOM	467	O	ASN A1019	18.292	25.849	55.662	1.00	28.59	
O									
ATOM	468	CB	ASN A1019	20.652	27.220	57.429	1.00	28.83	
C									
ATOM	469	CG	ASN A1019	20.615	28.130	58.657	1.00	30.96	
C									
ATOM	470	OD1	ASN A1019	21.354	29.114	58.735	1.00	33.38	
O									
ATOM	471	ND2	ASN A1019	19.751	27.813	59.610	1.00	30.20	
N									
ATOM	472	N	GLU A1020	20.174	24.636	55.577	1.00	28.93	
N									
ATOM	473	CA	GLU A1020	19.840	24.107	54.257	1.00	29.91	
C									
ATOM	474	C	GLU A1020	18.603	23.226	54.368	1.00	29.33	
C									
ATOM	475	O	GLU A1020	17.754	23.221	53.479	1.00	28.45	
O									
ATOM	476	CB	GLU A1020	20.989	23.286	53.652	1.00	31.26	
C									
ATOM	477	CG	GLU A1020	20.929	23.267	52.118	1.00	34.52	
C									
ATOM	478	CD	GLU A1020	21.895	22.290	51.461	1.00	35.77	
C									
ATOM	479	OE1	GLU A1020	23.046	22.172	51.941	1.00	36.35	
O									
ATOM	480	OE2	GLU A1020	21.499	21.657	50.448	1.00	34.94	
O									
ATOM	481	N	ALA A1021	18.503	22.480	55.464	1.00	29.92	
N									
ATOM	482	CA	ALA A1021	17.352	21.605	55.672	1.00	28.63	
C									
ATOM	483	C	ALA A1021	16.105	22.454	55.847	1.00	28.13	
C									
ATOM	484	O	ALA A1021	15.050	22.145	55.292	1.00	27.78	
O									
ATOM	485	CB	ALA A1021	17.561	20.736	56.897	1.00	28.54	
C									
ATOM	486	N	SER A1022	16.229	23.531	56.619	1.00	28.33	
N									
ATOM	487	CA	SER A1022	15.095	24.408	56.863	1.00	30.00	
C									
ATOM	488	C	SER A1022	14.537	24.967	55.572	1.00	29.19	
C									
ATOM	489	O	SER A1022	13.322	24.987	55.377	1.00	29.95	
O									
ATOM	490	CB	SER A1022	15.486	25.554	57.796	1.00	30.68	
C									
ATOM	491	OG	SER A1022	15.634	25.072	59.118	1.00	35.71	
O									
ATOM	492	N	VAL A1023	15.422	25.426	54.694	1.00	28.82	
N									
ATOM	493	CA	VAL A1023	14.996	25.971	53.410	1.00	29.04	
C									
ATOM	494	C	VAL A1023	14.229	24.909	52.616	1.00	28.36	

C									
ATOM	495	O	VAL A1023	13.214	25.205	51.988	1.00	27.63	
O									
ATOM	496	CB	VAL A1023	16.212	26.450	52.574	1.00	30.40	
C									
ATOM	497	CG1	VAL A1023	15.757	26.926	51.211	1.00	32.10	
C									
ATOM	498	CG2	VAL A1023	16.923	27.585	53.295	1.00	32.26	
C									
ATOM	499	N	MET A1024	14.719	23.673	52.650	1.00	27.76	
N									
ATOM	500	CA	MET A1024	14.086	22.578	51.919	1.00	27.18	
C									
ATOM	501	C	MET A1024	12.689	22.221	52.419	1.00	26.74	
C									
ATOM	502	O	MET A1024	11.880	21.680	51.664	1.00	26.51	
O									
ATOM	503	CB	MET A1024	14.978	21.330	51.960	1.00	27.59	
C									
ATOM	504	CG	MET A1024	16.279	21.473	51.183	1.00	29.37	
C									
ATOM	505	SD	MET A1024	17.257	19.952	51.179	1.00	31.09	
S									
ATOM	506	CE	MET A1024	16.304	18.975	50.036	1.00	32.26	
C									
ATOM	507	N	LYS A1025	12.401	22.518	53.684	1.00	26.06	
N									
ATOM	508	CA	LYS A1025	11.086	22.213	54.247	1.00	26.22	
C									
ATOM	509	C	LYS A1025	9.986	22.947	53.480	1.00	26.76	
C									
ATOM	510	O	LYS A1025	8.817	22.558	53.519	1.00	26.79	
O									
ATOM	511	CB	LYS A1025	11.016	22.629	55.719	1.00	24.68	
C									
ATOM	512	CG	LYS A1025	11.914	21.848	56.651	1.00	25.83	
C									
ATOM	513	CD	LYS A1025	11.798	22.354	58.084	1.00	25.80	
C									
ATOM	514	CE	LYS A1025	12.712	21.561	59.006	1.00	26.79	
C									
ATOM	515	NZ	LYS A1025	12.829	22.161	60.369	1.00	27.33	
N									
ATOM	516	N	GLU A1026	10.370	24.009	52.784	1.00	27.26	
N									
ATOM	517	CA	GLU A1026	9.418	24.816	52.027	1.00	28.93	
C									
ATOM	518	C	GLU A1026	9.116	24.278	50.632	1.00	28.15	
C									
ATOM	519	O	GLU A1026	8.174	24.732	49.987	1.00	29.37	
O									
ATOM	520	CB	GLU A1026	9.953	26.242	51.883	1.00	29.97	
C									
ATOM	521	CG	GLU A1026	10.406	26.876	53.184	1.00	34.59	
C									
ATOM	522	CD	GLU A1026	9.246	27.289	54.063	1.00	35.61	
C									
ATOM	523	OE1	GLU A1026	9.481	27.635	55.237	1.00	38.33	
O									
ATOM	524	OE2	GLU A1026	8.097	27.277	53.578	1.00	38.45	

O									
ATOM	525	N	PHE A1027	9.900	23.317	50.160	1.00	27.46	
N									
ATOM	526	CA	PHE A1027	9.693	22.806	48.813	1.00	27.10	
C									
ATOM	527	C	PHE A1027	8.897	21.518	48.673	1.00	27.81	
C									
ATOM	528	O	PHE A1027	9.106	20.554	49.406	1.00	27.51	
O									
ATOM	529	CB	PHE A1027	11.034	22.606	48.098	1.00	26.07	
C									
ATOM	530	CG	PHE A1027	11.996	23.749	48.255	1.00	26.22	
C									
ATOM	531	CD1	PHE A1027	11.542	25.059	48.338	1.00	26.62	
C									
ATOM	532	CD2	PHE A1027	13.369	23.512	48.295	1.00	25.86	
C									
ATOM	533	CE1	PHE A1027	12.443	26.123	48.459	1.00	26.38	
C									
ATOM	534	CE2	PHE A1027	14.274	24.569	48.416	1.00	24.98	
C									
ATOM	535	CZ	PHE A1027	13.811	25.872	48.498	1.00	25.20	
C									
ATOM	536	N	ASN A1028	7.984	21.524	47.706	1.00	27.62	
N									
ATOM	537	CA	ASN A1028	7.169	20.363	47.387	1.00	29.09	
C									
ATOM	538	C	ASN A1028	6.992	20.369	45.876	1.00	28.59	
C									
ATOM	539	O	ASN A1028	5.976	20.839	45.350	1.00	28.57	
O									
ATOM	540	CB	ASN A1028	5.802	20.429	48.070	1.00	31.22	
C									
ATOM	541	CG	ASN A1028	4.955	19.212	47.764	1.00	33.69	
C									
ATOM	542	OD1	ASN A1028	5.448	18.086	47.784	1.00	35.80	
O									
ATOM	543	ND2	ASN A1028	3.673	19.429	47.482	1.00	34.25	
N									
ATOM	544	N	CYS A1029	7.994	19.850	45.180	1.00	26.02	
N									
ATOM	545	CA	CYS A1029	7.959	19.817	43.726	1.00	25.87	
C									
ATOM	546	C	CYS A1029	8.617	18.559	43.201	1.00	24.25	
C									
ATOM	547	O	CYS A1029	9.654	18.138	43.705	1.00	23.96	
O									
ATOM	548	CB	CYS A1029	8.671	21.050	43.151	1.00	24.18	
C									
ATOM	549	SG	CYS A1029	8.765	21.083	41.349	1.00	25.38	
S									
ATOM	550	N	HIS A1030	8.005	17.967	42.181	1.00	24.43	
N									
ATOM	551	CA	HIS A1030	8.513	16.744	41.569	1.00	24.24	
C									
ATOM	552	C	HIS A1030	9.927	16.911	41.014	1.00	23.18	
C									
ATOM	553	O	HIS A1030	10.683	15.945	40.933	1.00	23.16	
O									
ATOM	554	CB	HIS A1030	7.574	16.301	40.439	1.00	24.97	

C									
ATOM	555	CG	HIS	A1030	7.961	15.003	39.801	1.00	25.96
C									
ATOM	556	ND1	HIS	A1030	7.805	13.787	40.432	1.00	26.64
N									
ATOM	557	CD2	HIS	A1030	8.511	14.732	38.593	1.00	25.58
C									
ATOM	558	CE1	HIS	A1030	8.242	12.823	39.640	1.00	25.98
C									
ATOM	559	NE2	HIS	A1030	8.675	13.369	38.519	1.00	26.10
N									
ATOM	560	N	HIS	A1031	10.288	18.131	40.627	1.00	22.43
N									
ATOM	561	CA	HIS	A1031	11.616	18.363	40.072	1.00	21.21
C									
ATOM	562	C	HIS	A1031	12.609	19.036	41.021	1.00	21.42
C									
ATOM	563	O	HIS	A1031	13.580	19.658	40.593	1.00	20.37
O									
ATOM	564	CB	HIS	A1031	11.494	19.138	38.764	1.00	22.26
C									
ATOM	565	CG	HIS	A1031	10.789	18.370	37.687	1.00	22.62
C									
ATOM	566	ND1	HIS	A1031	9.572	18.754	37.169	1.00	23.92
N									
ATOM	567	CD2	HIS	A1031	11.129	17.228	37.046	1.00	22.82
C									
ATOM	568	CE1	HIS	A1031	9.193	17.884	36.250	1.00	21.64
C									
ATOM	569	NE2	HIS	A1031	10.119	16.949	36.156	1.00	23.81
N									
ATOM	570	N	VAL	A1032	12.348	18.903	42.317	1.00	20.99
N									
ATOM	571	CA	VAL	A1032	13.242	19.413	43.349	1.00	20.52
C									
ATOM	572	C	VAL	A1032	13.423	18.241	44.311	1.00	20.81
C									
ATOM	573	O	VAL	A1032	12.435	17.655	44.759	1.00	20.38
O									
ATOM	574	CB	VAL	A1032	12.638	20.614	44.104	1.00	20.38
C									
ATOM	575	CG1	VAL	A1032	13.562	21.017	45.241	1.00	20.77
C									
ATOM	576	CG2	VAL	A1032	12.444	21.793	43.142	1.00	19.61
C									
ATOM	577	N	VAL	A1033	14.670	17.887	44.621	1.00	21.12
N									
ATOM	578	CA	VAL	A1033	14.932	16.769	45.530	1.00	21.57
C									
ATOM	579	C	VAL	A1033	14.212	17.030	46.847	1.00	22.51
C									
ATOM	580	O	VAL	A1033	14.377	18.076	47.473	1.00	21.03
O									
ATOM	581	CB	VAL	A1033	16.434	16.587	45.765	1.00	22.42
C									
ATOM	582	CG1	VAL	A1033	16.678	15.404	46.685	1.00	23.80
C									
ATOM	583	CG2	VAL	A1033	17.130	16.352	44.423	1.00	23.48
C									
ATOM	584	N	ARG	A1034	13.407	16.063	47.265	1.00	23.91

N								
ATOM	585	CA	ARG A1034	12.587	16.216	48.460	1.00	25.04
C								
ATOM	586	C	ARG A1034	13.176	15.898	49.836	1.00	24.63
C								
ATOM	587	O	ARG A1034	13.800	14.853	50.039	1.00	23.93
O								
ATOM	588	CB	ARG A1034	11.292	15.427	48.230	1.00	28.33
C								
ATOM	589	CG	ARG A1034	10.480	15.112	49.464	1.00	34.98
C								
ATOM	590	CD	ARG A1034	9.022	14.864	49.091	1.00	39.09
C								
ATOM	591	NE	ARG A1034	8.257	16.105	49.172	1.00	43.55
N								
ATOM	592	CZ	ARG A1034	8.023	16.758	50.309	1.00	45.73
C								
ATOM	593	NH1	ARG A1034	8.490	16.278	51.458	1.00	46.48
N								
ATOM	594	NH2	ARG A1034	7.343	17.900	50.301	1.00	46.67
N								
ATOM	595	N	LEU A1035	12.970	16.816	50.781	1.00	23.82
N								
ATOM	596	CA	LEU A1035	13.428	16.624	52.158	1.00	23.93
C								
ATOM	597	C	LEU A1035	12.399	15.684	52.751	1.00	24.00
C								
ATOM	598	O	LEU A1035	11.201	15.870	52.540	1.00	23.93
O								
ATOM	599	CB	LEU A1035	13.408	17.938	52.951	1.00	22.50
C								
ATOM	600	CG	LEU A1035	13.690	17.765	54.451	1.00	20.93
C								
ATOM	601	CD1	LEU A1035	15.119	17.250	54.651	1.00	18.95
C								
ATOM	602	CD2	LEU A1035	13.490	19.092	55.178	1.00	20.02
C								
ATOM	603	N	LEU A1036	12.846	14.678	53.493	1.00	23.70
N								
ATOM	604	CA	LEU A1036	11.903	13.725	54.058	1.00	23.90
C								
ATOM	605	C	LEU A1036	11.888	13.713	55.575	1.00	24.15
C								
ATOM	606	O	LEU A1036	10.951	13.208	56.185	1.00	24.10
O								
ATOM	607	CB	LEU A1036	12.201	12.321	53.526	1.00	24.31
C								
ATOM	608	CG	LEU A1036	11.856	12.106	52.047	1.00	23.87
C								
ATOM	609	CD1	LEU A1036	12.400	10.777	51.571	1.00	23.51
C								
ATOM	610	CD2	LEU A1036	10.346	12.157	51.871	1.00	23.91
C								
ATOM	611	N	GLY A1037	12.921	14.271	56.189	1.00	24.11
N								
ATOM	612	CA	GLY A1037	12.964	14.285	57.634	1.00	23.68
C								
ATOM	613	C	GLY A1037	14.289	14.757	58.180	1.00	23.53
C								
ATOM	614	O	GLY A1037	15.282	14.851	57.451	1.00	21.14

O								
ATOM	615	N	VAL A1038	14.291	15.054	59.474	1.00	23.62
N								
ATOM	616	CA	VAL A1038	15.474	15.534	60.162	1.00	25.35
C								
ATOM	617	C	VAL A1038	15.597	14.839	61.506	1.00	25.98
C								
ATOM	618	O	VAL A1038	14.603	14.627	62.199	1.00	26.60
O								
ATOM	619	CB	VAL A1038	15.379	17.052	60.443	1.00	26.56
C								
ATOM	620	CG1	VAL A1038	16.673	17.545	61.096	1.00	27.10
C								
ATOM	621	CG2	VAL A1038	15.091	17.805	59.157	1.00	27.73
C								
ATOM	622	N	VAL A1039	16.819	14.481	61.875	1.00	25.95
N								
ATOM	623	CA	VAL A1039	17.056	13.852	63.165	1.00	26.21
C								
ATOM	624	C	VAL A1039	17.957	14.825	63.916	1.00	26.51
C								
ATOM	625	O	VAL A1039	19.171	14.816	63.731	1.00	25.71
O								
ATOM	626	CB	VAL A1039	17.765	12.493	63.011	1.00	25.90
C								
ATOM	627	CG1	VAL A1039	18.037	11.891	64.386	1.00	28.75
C								
ATOM	628	CG2	VAL A1039	16.904	11.548	62.200	1.00	27.03
C								
ATOM	629	N	SER A1040	17.365	15.671	64.755	1.00	27.50
N								
ATOM	630	CA	SER A1040	18.152	16.662	65.488	1.00	28.61
C								
ATOM	631	C	SER A1040	18.339	16.337	66.964	1.00	29.07
C								
ATOM	632	O	SER A1040	18.714	17.203	67.756	1.00	29.61
O								
ATOM	633	CB	SER A1040	17.539	18.060	65.327	1.00	28.79
C								
ATOM	634	OG	SER A1040	16.192	18.101	65.761	1.00	29.64
O								
ATOM	635	N	GLN A1041	18.074	15.086	67.321	1.00	28.85
N								
ATOM	636	CA	GLN A1041	18.249	14.608	68.685	1.00	28.59
C								
ATOM	637	C	GLN A1041	19.326	13.532	68.620	1.00	29.49
C								
ATOM	638	O	GLN A1041	19.235	12.603	67.813	1.00	28.65
O								
ATOM	639	CB	GLN A1041	16.953	13.998	69.227	1.00	28.47
C								
ATOM	640	CG	GLN A1041	15.878	14.999	69.645	1.00	28.81
C								
ATOM	641	CD	GLN A1041	16.233	15.767	70.914	1.00	29.03
C								
ATOM	642	OE1	GLN A1041	16.658	15.180	71.912	1.00	27.92
O								
ATOM	643	NE2	GLN A1041	16.042	17.084	70.885	1.00	28.40
N								
ATOM	644	N	GLY A1042	20.346	13.660	69.461	1.00	29.78

N									
ATOM	645	CA	GLY	A1042	21.416	12.681	69.473	1.00	30.56
C									
ATOM	646	C	GLY	A1042	22.450	12.906	68.390	1.00	30.69
C									
ATOM	647	O	GLY	A1042	22.362	13.873	67.633	1.00	30.15
O									
ATOM	648	N	GLN	A1043	23.429	12.006	68.323	1.00	31.46
N									
ATOM	649	CA	GLN	A1043	24.515	12.079	67.346	1.00	32.43
C									
ATOM	650	C	GLN	A1043	24.522	10.850	66.440	1.00	32.77
C									
ATOM	651	O	GLN	A1043	24.241	9.743	66.891	1.00	33.12
O									
ATOM	652	CB	GLN	A1043	25.866	12.151	68.059	1.00	34.00
C									
ATOM	653	CG	GLN	A1043	26.148	13.442	68.812	1.00	37.12
C									
ATOM	654	CD	GLN	A1043	26.205	14.644	67.900	1.00	39.01
C									
ATOM	655	OE1	GLN	A1043	26.735	14.571	66.790	1.00	40.86
O									
ATOM	656	NE2	GLN	A1043	25.669	15.766	68.367	1.00	40.27
N									
ATOM	657	N	PRO	A1044	24.846	11.031	65.149	1.00	32.54
N									
ATOM	658	CA	PRO	A1044	25.186	12.322	64.549	1.00	32.39
C									
ATOM	659	C	PRO	A1044	23.914	13.000	64.050	1.00	32.36
C									
ATOM	660	O	PRO	A1044	22.865	12.363	63.955	1.00	33.32
O									
ATOM	661	CB	PRO	A1044	26.110	11.928	63.408	1.00	33.13
C									
ATOM	662	CG	PRO	A1044	25.473	10.668	62.920	1.00	32.65
C									
ATOM	663	CD	PRO	A1044	25.155	9.930	64.215	1.00	32.82
C									
ATOM	664	N	THR	A1045	24.001	14.287	63.736	1.00	31.62
N									
ATOM	665	CA	THR	A1045	22.838	15.007	63.235	1.00	31.95
C									
ATOM	666	C	THR	A1045	22.611	14.528	61.807	1.00	32.04
C									
ATOM	667	O	THR	A1045	23.544	14.512	61.009	1.00	31.50
O									
ATOM	668	CB	THR	A1045	23.078	16.527	63.238	1.00	30.98
C									
ATOM	669	OG1	THR	A1045	23.368	16.951	64.574	1.00	32.60
O									
ATOM	670	CG2	THR	A1045	21.843	17.267	62.734	1.00	30.05
C									
ATOM	671	N	LEU	A1046	21.375	14.142	61.494	1.00	31.79
N									
ATOM	672	CA	LEU	A1046	21.040	13.620	60.171	1.00	31.21
C									
ATOM	673	C	LEU	A1046	19.897	14.355	59.488	1.00	30.26
C									
ATOM	674	O	LEU	A1046	19.038	14.962	60.129	1.00	29.16

O									
ATOM	675	CB	LEU A1046	20.624	12.146	60.268	1.00	31.56	
C									
ATOM	676	CG	LEU A1046	21.428	11.113	61.055	1.00	32.73	
C									
ATOM	677	CD1	LEU A1046	20.616	9.840	61.169	1.00	33.67	
C									
ATOM	678	CD2	LEU A1046	22.744	10.833	60.371	1.00	34.70	
C									
ATOM	679	N	VAL A1047	19.907	14.270	58.167	1.00	29.24	
N									
ATOM	680	CA	VAL A1047	18.879	14.842	57.320	1.00	28.54	
C									
ATOM	681	C	VAL A1047	18.614	13.725	56.315	1.00	27.82	
C									
ATOM	682	O	VAL A1047	19.549	13.207	55.709	1.00	26.31	
O									
ATOM	683	CB	VAL A1047	19.396	16.111	56.609	1.00	29.50	
C									
ATOM	684	CG1	VAL A1047	18.489	16.476	55.459	1.00	30.23	
C									
ATOM	685	CG2	VAL A1047	19.447	17.267	57.605	1.00	31.02	
C									
ATOM	686	N	ILE A1048	17.355	13.336	56.151	1.00	26.75	
N									
ATOM	687	CA	ILE A1048	17.027	12.276	55.206	1.00	27.52	
C									
ATOM	688	C	ILE A1048	16.263	12.860	54.034	1.00	27.06	
C									
ATOM	689	O	ILE A1048	15.316	13.633	54.204	1.00	25.43	
O									
ATOM	690	CB	ILE A1048	16.203	11.127	55.847	1.00	29.73	
C									
ATOM	691	CG1	ILE A1048	14.870	11.656	56.362	1.00	31.04	
C									
ATOM	692	CG2	ILE A1048	17.008	10.480	56.987	1.00	31.47	
C									
ATOM	693	CD1	ILE A1048	13.856	10.566	56.643	1.00	32.40	
C									
ATOM	694	N	MET A1049	16.694	12.478	52.842	1.00	26.59	
N									
ATOM	695	CA	MET A1049	16.126	12.995	51.617	1.00	27.96	
C									
ATOM	696	C	MET A1049	15.826	11.925	50.583	1.00	27.54	
C									
ATOM	697	O	MET A1049	16.293	10.788	50.678	1.00	26.92	
O									
ATOM	698	CB	MET A1049	17.096	14.001	50.998	1.00	31.77	
C									
ATOM	699	CG	MET A1049	17.301	15.262	51.820	1.00	36.77	
C									
ATOM	700	SD	MET A1049	18.637	16.246	51.139	1.00	44.84	
S									
ATOM	701	CE	MET A1049	18.102	16.428	49.440	1.00	42.11	
C									
ATOM	702	N	GLU A1050	15.041	12.329	49.593	1.00	25.29	
N									
ATOM	703	CA	GLU A1050	14.658	11.485	48.484	1.00	25.13	
C									
ATOM	704	C	GLU A1050	15.937	10.898	47.889	1.00	24.01	

C									
ATOM	705	O	GLU A1050	16.916	11.613	47.683	1.00	22.50	
O									
ATOM	706	CB	GLU A1050	13.933	12.340	47.443	1.00	24.45	
C									
ATOM	707	CG	GLU A1050	13.500	11.605	46.200	1.00	25.49	
C									
ATOM	708	CD	GLU A1050	12.879	12.529	45.170	1.00	25.10	
C									
ATOM	709	OE1	GLU A1050	12.590	12.054	44.060	1.00	24.97	
O									
ATOM	710	OE2	GLU A1050	12.675	13.730	45.461	1.00	26.25	
O									
ATOM	711	N	LEU A1051	15.931	9.596	47.620	1.00	24.01	
N									
ATOM	712	CA	LEU A1051	17.104	8.941	47.047	1.00	23.23	
C									
ATOM	713	C	LEU A1051	17.134	9.155	45.535	1.00	22.80	
C									
ATOM	714	O	LEU A1051	16.146	8.928	44.851	1.00	22.75	
O									
ATOM	715	CB	LEU A1051	17.079	7.437	47.360	1.00	24.45	
C									
ATOM	716	CG	LEU A1051	18.263	6.594	46.863	1.00	22.72	
C									
ATOM	717	CD1	LEU A1051	19.544	7.080	47.525	1.00	23.98	
C									
ATOM	718	CD2	LEU A1051	18.031	5.113	47.194	1.00	23.76	
C									
ATOM	719	N	MET A1052	18.277	9.598	45.026	1.00	23.22	
N									
ATOM	720	CA	MET A1052	18.473	9.837	43.600	1.00	24.25	
C									
ATOM	721	C	MET A1052	19.578	8.854	43.216	1.00	24.98	
C									
ATOM	722	O	MET A1052	20.767	9.181	43.293	1.00	23.42	
O									
ATOM	723	CB	MET A1052	18.935	11.285	43.372	1.00	24.55	
C									
ATOM	724	CG	MET A1052	17.943	12.339	43.879	1.00	24.25	
C									
ATOM	725	SD	MET A1052	16.321	12.208	43.092	1.00	25.17	
S									
ATOM	726	CE	MET A1052	16.704	12.783	41.428	1.00	24.92	
C									
ATOM	727	N	THR A1053	19.181	7.649	42.805	1.00	26.09	
N									
ATOM	728	CA	THR A1053	20.153	6.600	42.493	1.00	27.23	
C									
ATOM	729	C	THR A1053	21.257	6.900	41.480	1.00	27.85	
C									
ATOM	730	O	THR A1053	22.354	6.363	41.606	1.00	27.93	
O									
ATOM	731	CB	THR A1053	19.444	5.268	42.098	1.00	27.09	
C									
ATOM	732	OG1	THR A1053	18.581	5.478	40.974	1.00	27.57	
O									
ATOM	733	CG2	THR A1053	18.614	4.744	43.276	1.00	27.54	
C									
ATOM	734	N	ARG A1054	20.998	7.747	40.489	1.00	27.94	

N									
ATOM	735	CA	ARG	A1054	22.031	8.056	39.499	1.00	28.48
C									
ATOM	736	C	ARG	A1054	23.034	9.157	39.883	1.00	28.15
C									
ATOM	737	O	ARG	A1054	23.841	9.565	39.054	1.00	29.23
O									
ATOM	738	CB	ARG	A1054	21.399	8.413	38.150	1.00	30.54
C									
ATOM	739	CG	ARG	A1054	21.108	7.238	37.216	1.00	32.85
C									
ATOM	740	CD	ARG	A1054	19.916	6.431	37.657	1.00	34.31
C									
ATOM	741	NE	ARG	A1054	19.282	5.705	36.550	1.00	35.72
N									
ATOM	742	CZ	ARG	A1054	19.874	4.770	35.809	1.00	37.42
C									
ATOM	743	NH1	ARG	A1054	21.139	4.426	36.026	1.00	37.69
N									
ATOM	744	NH2	ARG	A1054	19.185	4.144	34.865	1.00	38.81
N									
ATOM	745	N	GLY	A1055	22.992	9.639	41.123	1.00	27.23
N									
ATOM	746	CA	GLY	A1055	23.937	10.660	41.550	1.00	25.42
C									
ATOM	747	C	GLY	A1055	23.758	12.038	40.922	1.00	25.23
C									
ATOM	748	O	GLY	A1055	22.729	12.323	40.309	1.00	23.81
O									
ATOM	749	N	ASP	A1056	24.769	12.892	41.062	1.00	25.11
N									
ATOM	750	CA	ASP	A1056	24.684	14.246	40.510	1.00	26.01
C									
ATOM	751	C	ASP	A1056	24.768	14.235	38.984	1.00	25.79
C									
ATOM	752	O	ASP	A1056	25.349	13.323	38.378	1.00	25.35
O									
ATOM	753	CB	ASP	A1056	25.781	15.142	41.095	1.00	26.20
C									
ATOM	754	CG	ASP	A1056	27.164	14.777	40.596	1.00	28.11
C									
ATOM	755	OD1	ASP	A1056	27.739	13.780	41.076	1.00	28.78
O									
ATOM	756	OD2	ASP	A1056	27.675	15.491	39.712	1.00	27.37
O									
ATOM	757	N	LEU	A1057	24.180	15.255	38.371	1.00	24.59
N									
ATOM	758	CA	LEU	A1057	24.146	15.368	36.921	1.00	24.01
C									
ATOM	759	C	LEU	A1057	25.509	15.508	36.253	1.00	23.82
C									
ATOM	760	O	LEU	A1057	25.694	15.035	35.132	1.00	21.71
O									
ATOM	761	CB	LEU	A1057	23.259	16.544	36.500	1.00	23.32
C									
ATOM	762	CG	LEU	A1057	23.153	16.728	34.981	1.00	22.90
C									
ATOM	763	CD1	LEU	A1057	22.520	15.482	34.365	1.00	23.07
C									
ATOM	764	CD2	LEU	A1057	22.320	17.969	34.659	1.00	22.41

C									
ATOM	765	N	LYS A1058	26.459	16.154	36.920	1.00	24.23	
N									
ATOM	766	CA	LYS A1058	27.774	16.313	36.309	1.00	27.06	
C									
ATOM	767	C	LYS A1058	28.446	14.952	36.114	1.00	27.59	
C									
ATOM	768	O	LYS A1058	28.933	14.640	35.027	1.00	27.20	
O									
ATOM	769	CB	LYS A1058	28.684	17.207	37.157	1.00	27.89	
C									
ATOM	770	CG	LYS A1058	30.057	17.358	36.504	1.00	29.99	
C									
ATOM	771	CD	LYS A1058	31.050	18.151	37.324	1.00	31.64	
C									
ATOM	772	CE	LYS A1058	32.395	18.185	36.591	1.00	33.30	
C									
ATOM	773	NZ	LYS A1058	33.455	18.894	37.355	1.00	33.01	
N									
ATOM	774	N	SER A1059	28.469	14.149	37.174	1.00	28.77	
N									
ATOM	775	CA	SER A1059	29.076	12.822	37.115	1.00	29.75	
C									
ATOM	776	C	SER A1059	28.340	11.948	36.111	1.00	30.79	
C									
ATOM	777	O	SER A1059	28.956	11.160	35.400	1.00	31.10	
O									
ATOM	778	CB	SER A1059	29.033	12.158	38.490	1.00	30.57	
C									
ATOM	779	OG	SER A1059	29.684	12.954	39.466	1.00	31.67	
O									
ATOM	780	N	TYR A1060	27.016	12.085	36.053	1.00	31.22	
N									
ATOM	781	CA	TYR A1060	26.219	11.291	35.126	1.00	31.33	
C									
ATOM	782	C	TYR A1060	26.567	11.632	33.678	1.00	32.61	
C									
ATOM	783	O	TYR A1060	26.666	10.742	32.824	1.00	32.54	
O									
ATOM	784	CB	TYR A1060	24.724	11.522	35.364	1.00	30.63	
C									
ATOM	785	CG	TYR A1060	23.856	10.868	34.318	1.00	30.43	
C									
ATOM	786	CD1	TYR A1060	23.793	9.479	34.205	1.00	31.37	
C									
ATOM	787	CD2	TYR A1060	23.151	11.636	33.396	1.00	30.77	
C									
ATOM	788	CE1	TYR A1060	23.055	8.873	33.189	1.00	31.19	
C									
ATOM	789	CE2	TYR A1060	22.410	11.043	32.381	1.00	31.19	
C									
ATOM	790	CZ	TYR A1060	22.368	9.663	32.281	1.00	31.79	
C									
ATOM	791	OH	TYR A1060	21.652	9.082	31.263	1.00	32.50	
O									
ATOM	792	N	LEU A1061	26.748	12.921	33.403	1.00	32.33	
N									
ATOM	793	CA	LEU A1061	27.100	13.368	32.061	1.00	32.62	
C									
ATOM	794	C	LEU A1061	28.505	12.885	31.702	1.00	33.87	

C									
ATOM	795	O	LEU A1061	28.739	12.407	30.592	1.00	33.84	
O									
ATOM	796	CB	LEU A1061	27.027	14.896	31.974	1.00	30.76	
C									
ATOM	797	CG	LEU A1061	25.627	15.518	32.075	1.00	30.20	
C									
ATOM	798	CD1	LEU A1061	25.727	17.030	32.210	1.00	31.22	
C									
ATOM	799	CD2	LEU A1061	24.820	15.156	30.843	1.00	29.72	
C									
ATOM	800	N	ARG A1062	29.438	13.007	32.642	1.00	35.64	
N									
ATOM	801	CA	ARG A1062	30.810	12.568	32.401	1.00	38.37	
C									
ATOM	802	C	ARG A1062	30.836	11.074	32.079	1.00	39.00	
C									
ATOM	803	O	ARG A1062	31.561	10.638	31.185	1.00	38.94	
O									
ATOM	804	CB	ARG A1062	31.695	12.828	33.630	1.00	38.58	
C									
ATOM	805	CG	ARG A1062	31.898	14.295	33.991	1.00	41.31	
C									
ATOM	806	CD	ARG A1062	32.698	15.048	32.937	1.00	42.21	
C									
ATOM	807	NE	ARG A1062	34.030	14.483	32.727	1.00	44.06	
N									
ATOM	808	CZ	ARG A1062	34.970	15.045	31.968	1.00	44.58	
C									
ATOM	809	NH1	ARG A1062	34.727	16.192	31.343	1.00	44.28	
N									
ATOM	810	NH2	ARG A1062	36.156	14.464	31.835	1.00	44.18	
N									
ATOM	811	N	SER A1063	30.037	10.299	32.809	1.00	40.20	
N									
ATOM	812	CA	SER A1063	29.988	8.853	32.612	1.00	41.70	
C									
ATOM	813	C	SER A1063	29.549	8.474	31.202	1.00	42.85	
C									
ATOM	814	O	SER A1063	29.748	7.338	30.773	1.00	43.24	
O									
ATOM	815	CB	SER A1063	29.040	8.202	33.627	1.00	41.52	
C									
ATOM	816	OG	SER A1063	27.685	8.291	33.208	1.00	41.02	
O									
ATOM	817	N	LEU A1064	28.952	9.416	30.482	1.00	43.80	
N									
ATOM	818	CA	LEU A1064	28.492	9.137	29.126	1.00	45.47	
C									
ATOM	819	C	LEU A1064	29.544	9.467	28.074	1.00	47.26	
C									
ATOM	820	O	LEU A1064	29.302	9.313	26.878	1.00	47.07	
O									
ATOM	821	CB	LEU A1064	27.212	9.916	28.820	1.00	44.46	
C									
ATOM	822	CG	LEU A1064	26.023	9.692	29.756	1.00	43.90	
C									
ATOM	823	CD1	LEU A1064	24.834	10.480	29.235	1.00	43.45	
C									
ATOM	824	CD2	LEU A1064	25.686	8.205	29.842	1.00	43.77	

C									
ATOM	825	N	ARG	A1065	30.709	9.922	28.521	1.00	49.35
N									
ATOM	826	CA	ARG	A1065	31.783	10.263	27.601	1.00	52.09
C									
ATOM	827	C	ARG	A1065	32.370	9.016	26.949	1.00	54.17
C									
ATOM	828	O	ARG	A1065	32.645	8.025	27.624	1.00	53.99
O									
ATOM	829	CB	ARG	A1065	32.886	11.020	28.337	1.00	52.42
C									
ATOM	830	CG	ARG	A1065	32.592	12.489	28.550	1.00	52.70
C									
ATOM	831	CD	ARG	A1065	33.639	13.120	29.442	1.00	52.80
C									
ATOM	832	NE	ARG	A1065	33.543	14.575	29.433	1.00	53.49
N									
ATOM	833	CZ	ARG	A1065	33.843	15.332	28.385	1.00	53.15
C									
ATOM	834	NH1	ARG	A1065	34.263	14.771	27.261	1.00	53.36
N									
ATOM	835	NH2	ARG	A1065	33.720	16.649	28.459	1.00	53.44
N									
ATOM	836	N	PRO	A1066	32.564	9.052	25.620	1.00	56.25
N									
ATOM	837	CA	PRO	A1066	33.124	7.925	24.867	1.00	57.98
C									
ATOM	838	C	PRO	A1066	34.489	7.516	25.414	1.00	59.42
C									
ATOM	839	O	PRO	A1066	34.835	6.333	25.436	1.00	59.72
O									
ATOM	840	CB	PRO	A1066	33.214	8.474	23.446	1.00	57.80
C									
ATOM	841	CG	PRO	A1066	32.049	9.415	23.385	1.00	57.81
C									
ATOM	842	CD	PRO	A1066	32.167	10.140	24.708	1.00	56.81
C									
ATOM	843	N	GLU	A1067	35.260	8.505	25.854	1.00	60.85
N									
ATOM	844	CA	GLU	A1067	36.585	8.253	26.408	1.00	62.41
C									
ATOM	845	C	GLU	A1067	36.479	7.378	27.653	1.00	63.46
C									
ATOM	846	O	GLU	A1067	37.005	6.263	27.687	1.00	63.97
O									
ATOM	847	N	MET	A1068	35.794	7.890	28.671	1.00	64.16
N									
ATOM	848	CA	MET	A1068	35.610	7.160	29.922	1.00	64.75
C									
ATOM	849	C	MET	A1068	34.508	6.111	29.793	1.00	65.31
C									
ATOM	850	O	MET	A1068	33.320	6.423	29.900	1.00	65.66
O									
ATOM	851	N	PRO	A1077	23.717	11.407	24.803	1.00	50.21
N									
ATOM	852	CA	PRO	A1077	22.259	11.525	24.908	1.00	49.31
C									
ATOM	853	C	PRO	A1077	21.624	12.203	23.693	1.00	48.53
C									
ATOM	854	O	PRO	A1077	22.190	13.136	23.121	1.00	48.48

O									
ATOM	855	CB	PRO	A1077	22.073	12.326	26.196	1.00	49.44
C									
ATOM	856	CG	PRO	A1077	23.272	13.215	26.204	1.00	50.26
C									
ATOM	857	CD	PRO	A1077	24.386	12.271	25.793	1.00	50.38
C									
ATOM	858	N	SER	A1078	20.445	11.724	23.307	1.00	47.25
N									
ATOM	859	CA	SER	A1078	19.729	12.262	22.156	1.00	45.97
C									
ATOM	860	C	SER	A1078	19.218	13.677	22.394	1.00	45.53
C									
ATOM	861	O	SER	A1078	19.163	14.151	23.526	1.00	45.17
O									
ATOM	862	CB	SER	A1078	18.541	11.362	21.807	1.00	45.85
C									
ATOM	863	OG	SER	A1078	17.542	11.432	22.810	1.00	44.10
O									
ATOM	864	N	LEU	A1079	18.840	14.344	21.309	1.00	44.74
N									
ATOM	865	CA	LEU	A1079	18.319	15.696	21.387	1.00	44.11
C									
ATOM	866	C	LEU	A1079	17.122	15.732	22.325	1.00	43.56
C									
ATOM	867	O	LEU	A1079	17.003	16.639	23.143	1.00	43.97
O									
ATOM	868	CB	LEU	A1079	17.899	16.184	20.001	1.00	44.85
C									
ATOM	869	N	SER	A1080	16.237	14.746	22.202	1.00	42.66
N									
ATOM	870	CA	SER	A1080	15.049	14.672	23.048	1.00	42.08
C									
ATOM	871	C	SER	A1080	15.380	14.468	24.520	1.00	40.47
C									
ATOM	872	O	SER	A1080	14.743	15.063	25.391	1.00	39.95
O									
ATOM	873	CB	SER	A1080	14.126	13.549	22.582	1.00	42.75
C									
ATOM	874	OG	SER	A1080	13.350	13.976	21.480	1.00	46.12
O									
ATOM	875	N	LYS	A1081	16.369	13.626	24.798	1.00	38.72
N									
ATOM	876	CA	LYS	A1081	16.770	13.377	26.173	1.00	37.03
C									
ATOM	877	C	LYS	A1081	17.356	14.661	26.764	1.00	35.75
C									
ATOM	878	O	LYS	A1081	17.112	14.988	27.921	1.00	35.30
O									
ATOM	879	CB	LYS	A1081	17.803	12.248	26.233	1.00	37.18
C									
ATOM	880	N	MET	A1082	18.127	15.389	25.963	1.00	34.22
N									
ATOM	881	CA	MET	A1082	18.725	16.631	26.432	1.00	33.27
C									
ATOM	882	C	MET	A1082	17.668	17.688	26.718	1.00	31.88
C									
ATOM	883	O	MET	A1082	17.744	18.399	27.718	1.00	31.22
O									
ATOM	884	CB	MET	A1082	19.719	17.170	25.407	1.00	32.69

C									
ATOM	885	CG	MET	A1082	21.034	16.423	25.369	1.00	34.08
C									
ATOM	886	SD	MET	A1082	22.228	17.260	24.309	1.00	35.04
S									
ATOM	887	CE	MET	A1082	21.798	16.572	22.721	1.00	36.67
C									
ATOM	888	N	ILE	A1083	16.683	17.789	25.837	1.00	31.11
N									
ATOM	889	CA	ILE	A1083	15.613	18.762	26.008	1.00	31.70
C									
ATOM	890	C	ILE	A1083	14.739	18.386	27.199	1.00	30.87
C									
ATOM	891	O	ILE	A1083	14.202	19.258	27.881	1.00	29.96
O									
ATOM	892	CB	ILE	A1083	14.729	18.849	24.750	1.00	32.09
C									
ATOM	893	CG1	ILE	A1083	15.590	19.225	23.542	1.00	34.08
C									
ATOM	894	CG2	ILE	A1083	13.622	19.876	24.957	1.00	32.34
C									
ATOM	895	CD1	ILE	A1083	16.247	20.580	23.653	1.00	36.60
C									
ATOM	896	N	GLN	A1084	14.596	17.089	27.446	1.00	30.30
N									
ATOM	897	CA	GLN	A1084	13.790	16.630	28.571	1.00	30.80
C									
ATOM	898	C	GLN	A1084	14.474	17.074	29.866	1.00	29.31
C									
ATOM	899	O	GLN	A1084	13.818	17.518	30.802	1.00	28.83
O									
ATOM	900	CB	GLN	A1084	13.649	15.099	28.539	1.00	30.73
C									
ATOM	901	CG	GLN	A1084	12.833	14.494	29.683	1.00	32.39
C									
ATOM	902	CD	GLN	A1084	11.361	14.892	29.653	1.00	34.29
C									
ATOM	903	OE1	GLN	A1084	10.754	15.003	28.586	1.00	35.55
O									
ATOM	904	NE2	GLN	A1084	10.777	15.090	30.831	1.00	34.50
N									
ATOM	905	N	MET	A1085	15.796	16.950	29.913	1.00	28.54
N									
ATOM	906	CA	MET	A1085	16.548	17.351	31.098	1.00	28.16
C									
ATOM	907	C	MET	A1085	16.433	18.851	31.319	1.00	26.68
C									
ATOM	908	O	MET	A1085	16.256	19.314	32.447	1.00	25.69
O									
ATOM	909	CB	MET	A1085	18.020	16.971	30.957	1.00	29.48
C									
ATOM	910	CG	MET	A1085	18.262	15.476	30.997	1.00	31.03
C									
ATOM	911	SD	MET	A1085	19.989	15.097	31.283	1.00	35.66
S									
ATOM	912	CE	MET	A1085	20.646	15.318	29.654	1.00	34.45
C									
ATOM	913	N	ALA	A1086	16.531	19.605	30.231	1.00	25.68
N									
ATOM	914	CA	ALA	A1086	16.436	21.053	30.300	1.00	25.06

C									
ATOM	915	C	ALA	A1086	15.079	21.459	30.859	1.00	24.78
C									
ATOM	916	O	ALA	A1086	14.977	22.373	31.676	1.00	24.75
O									
ATOM	917	CB	ALA	A1086	16.622	21.649	28.914	1.00	24.11
C									
ATOM	918	N	GLY	A1087	14.034	20.773	30.411	1.00	24.46
N									
ATOM	919	CA	GLY	A1087	12.695	21.098	30.865	1.00	23.43
C									
ATOM	920	C	GLY	A1087	12.463	20.798	32.329	1.00	22.99
C									
ATOM	921	O	GLY	A1087	11.788	21.559	33.024	1.00	23.28
O									
ATOM	922	N	GLU	A1088	13.013	19.683	32.799	1.00	22.82
N									
ATOM	923	CA	GLU	A1088	12.854	19.283	34.192	1.00	22.14
C									
ATOM	924	C	GLU	A1088	13.580	20.263	35.117	1.00	22.13
C									
ATOM	925	O	GLU	A1088	13.031	20.686	36.136	1.00	20.88
O									
ATOM	926	CB	GLU	A1088	13.375	17.855	34.375	1.00	22.81
C									
ATOM	927	CG	GLU	A1088	12.690	16.850	33.435	1.00	25.10
C									
ATOM	928	CD	GLU	A1088	13.232	15.434	33.559	1.00	26.12
C									
ATOM	929	OE1	GLU	A1088	14.452	15.277	33.769	1.00	25.99
O									
ATOM	930	OE2	GLU	A1088	12.438	14.476	33.424	1.00	25.70
O									
ATOM	931	N	ILE	A1089	14.806	20.627	34.753	1.00	20.22
N									
ATOM	932	CA	ILE	A1089	15.599	21.563	35.546	1.00	20.98
C									
ATOM	933	C	ILE	A1089	14.917	22.927	35.600	1.00	21.22
C									
ATOM	934	O	ILE	A1089	14.838	23.554	36.663	1.00	22.10
O									
ATOM	935	CB	ILE	A1089	17.016	21.754	34.940	1.00	20.69
C									
ATOM	936	CG1	ILE	A1089	17.795	20.433	35.011	1.00	20.64
C									
ATOM	937	CG2	ILE	A1089	17.749	22.866	35.681	1.00	18.72
C									
ATOM	938	CD1	ILE	A1089	19.100	20.431	34.215	1.00	19.57
C									
ATOM	939	N	ALA	A1090	14.429	23.377	34.447	1.00	19.87
N									
ATOM	940	CA	ALA	A1090	13.747	24.663	34.344	1.00	20.24
C									
ATOM	941	C	ALA	A1090	12.449	24.646	35.152	1.00	19.68
C									
ATOM	942	O	ALA	A1090	12.062	25.660	35.728	1.00	20.08
O									
ATOM	943	CB	ALA	A1090	13.452	24.989	32.875	1.00	19.78
C									
ATOM	944	N	ASP	A1091	11.781	23.497	35.200	1.00	20.03

N									
ATOM	945	CA	ASP	A1091	10.535	23.396	35.961	1.00	20.16
C									
ATOM	946	C	ASP	A1091	10.836	23.518	37.457	1.00	19.57
C									
ATOM	947	O	ASP	A1091	10.134	24.215	38.186	1.00	19.64
O									
ATOM	948	CB	ASP	A1091	9.822	22.066	35.680	1.00	18.81
C									
ATOM	949	CG	ASP	A1091	8.399	22.041	36.231	1.00	21.37
C									
ATOM	950	OD1	ASP	A1091	7.581	22.884	35.807	1.00	21.94
O									
ATOM	951	OD2	ASP	A1091	8.094	21.189	37.091	1.00	22.30
O									
ATOM	952	N	GLY	A1092	11.884	22.838	37.913	1.00	18.41
N									
ATOM	953	CA	GLY	A1092	12.243	22.920	39.317	1.00	17.43
C									
ATOM	954	C	GLY	A1092	12.625	24.346	39.673	1.00	17.88
C									
ATOM	955	O	GLY	A1092	12.257	24.853	40.740	1.00	17.91
O									
ATOM	956	N	MET	A1093	13.360	25.002	38.778	1.00	17.50
N									
ATOM	957	CA	MET	A1093	13.785	26.379	39.008	1.00	18.03
C									
ATOM	958	C	MET	A1093	12.584	27.318	38.968	1.00	19.25
C									
ATOM	959	O	MET	A1093	12.497	28.251	39.762	1.00	20.32
O									
ATOM	960	CB	MET	A1093	14.820	26.800	37.967	1.00	17.76
C									
ATOM	961	CG	MET	A1093	16.170	26.087	38.113	1.00	19.10
C									
ATOM	962	SD	MET	A1093	16.909	26.353	39.738	1.00	20.39
S									
ATOM	963	CE	MET	A1093	17.132	28.154	39.709	1.00	21.07
C									
ATOM	964	N	ALA	A1094	11.654	27.074	38.048	1.00	19.76
N									
ATOM	965	CA	ALA	A1094	10.456	27.909	37.969	1.00	20.51
C									
ATOM	966	C	ALA	A1094	9.725	27.831	39.311	1.00	21.07
C									
ATOM	967	O	ALA	A1094	9.256	28.844	39.834	1.00	21.81
O									
ATOM	968	CB	ALA	A1094	9.548	27.424	36.840	1.00	19.84
C									
ATOM	969	N	TYR	A1095	9.639	26.622	39.865	1.00	21.19
N									
ATOM	970	CA	TYR	A1095	8.986	26.402	41.154	1.00	21.83
C									
ATOM	971	C	TYR	A1095	9.698	27.224	42.229	1.00	23.46
C									
ATOM	972	O	TYR	A1095	9.068	27.957	43.002	1.00	22.56
O									
ATOM	973	CB	TYR	A1095	9.035	24.913	41.534	1.00	21.54
C									
ATOM	974	CG	TYR	A1095	8.518	24.628	42.934	1.00	22.93

C									
ATOM	975	CD1	TYR	A1095	7.149	24.607	43.207	1.00	23.33
C									
ATOM	976	CD2	TYR	A1095	9.400	24.436	43.996	1.00	23.82
C									
ATOM	977	CE1	TYR	A1095	6.672	24.405	44.505	1.00	23.48
C									
ATOM	978	CE2	TYR	A1095	8.934	24.232	45.301	1.00	24.47
C									
ATOM	979	CZ	TYR	A1095	7.568	24.219	45.544	1.00	24.72
C									
ATOM	980	OH	TYR	A1095	7.107	24.015	46.827	1.00	25.67
O									
ATOM	981	N	LEU	A1096	11.019	27.093	42.272	1.00	23.30
N									
ATOM	982	CA	LEU	A1096	11.829	27.823	43.236	1.00	24.83
C									
ATOM	983	C	LEU	A1096	11.595	29.332	43.129	1.00	24.52
C									
ATOM	984	O	LEU	A1096	11.273	29.988	44.120	1.00	24.89
O									
ATOM	985	CB	LEU	A1096	13.311	27.507	43.011	1.00	24.65
C									
ATOM	986	CG	LEU	A1096	14.014	26.598	44.021	1.00	27.42
C									
ATOM	987	CD1	LEU	A1096	13.142	25.417	44.390	1.00	27.26
C									
ATOM	988	CD2	LEU	A1096	15.342	26.142	43.434	1.00	27.69
C									
ATOM	989	N	ASN	A1097	11.754	29.877	41.926	1.00	25.01
N									
ATOM	990	CA	ASN	A1097	11.564	31.310	41.700	1.00	25.09
C									
ATOM	991	C	ASN	A1097	10.128	31.760	42.022	1.00	26.02
C									
ATOM	992	O	ASN	A1097	9.914	32.864	42.532	1.00	25.13
O									
ATOM	993	CB	ASN	A1097	11.913	31.675	40.243	1.00	24.95
C									
ATOM	994	CG	ASN	A1097	13.427	31.694	39.970	1.00	26.01
C									
ATOM	995	OD1	ASN	A1097	13.856	31.926	38.839	1.00	24.41
O									
ATOM	996	ND2	ASN	A1097	14.232	31.458	41.004	1.00	23.19
N									
ATOM	997	N	ALA	A1098	9.152	30.904	41.727	1.00	26.74
N									
ATOM	998	CA	ALA	A1098	7.750	31.223	41.991	1.00	27.75
C									
ATOM	999	C	ALA	A1098	7.509	31.376	43.492	1.00	29.50
C									
ATOM	1000	O	ALA	A1098	6.645	32.142	43.919	1.00	29.69
O									
ATOM	1001	CB	ALA	A1098	6.851	30.144	41.427	1.00	26.95
C									
ATOM	1002	N	ASN	A1099	8.271	30.644	44.294	1.00	30.13
N									
ATOM	1003	CA	ASN	A1099	8.129	30.748	45.736	1.00	30.23
C									
ATOM	1004	C	ASN	A1099	9.059	31.808	46.312	1.00	29.27

C									
ATOM	1005	O	ASN A1099	9.296	31.857	47.518	1.00	28.65	
O									
ATOM	1006	CB	ASN A1099	8.377	29.397	46.397	1.00	32.56	
C									
ATOM	1007	CG	ASN A1099	7.246	28.418	46.144	1.00	34.58	
C									
ATOM	1008	OD1	ASN A1099	7.170	27.783	45.086	1.00	34.70	
O									
ATOM	1009	ND2	ASN A1099	6.343	28.310	47.109	1.00	35.43	
N									
ATOM	1010	N	LYS A1100	9.584	32.657	45.437	1.00	29.47	
N									
ATOM	1011	CA	LYS A1100	10.465	33.743	45.849	1.00	29.75	
C									
ATOM	1012	C	LYS A1100	11.808	33.318	46.435	1.00	29.10	
C									
ATOM	1013	O	LYS A1100	12.260	33.857	47.450	1.00	28.76	
O									
ATOM	1014	CB	LYS A1100	9.728	34.660	46.836	1.00	32.12	
C									
ATOM	1015	CG	LYS A1100	8.564	35.413	46.203	1.00	34.99	
C									
ATOM	1016	CD	LYS A1100	9.064	36.316	45.079	1.00	36.91	
C									
ATOM	1017	CE	LYS A1100	7.919	37.041	44.378	1.00	40.08	
C									
ATOM	1018	NZ	LYS A1100	8.427	37.966	43.318	1.00	41.72	
N									
ATOM	1019	N	PHE A1101	12.443	32.346	45.792	1.00	27.72	
N									
ATOM	1020	CA	PHE A1101	13.756	31.888	46.220	1.00	26.30	
C									
ATOM	1021	C	PHE A1101	14.692	31.990	45.028	1.00	25.67	
C									
ATOM	1022	O	PHE A1101	14.314	31.655	43.903	1.00	25.05	
O									
ATOM	1023	CB	PHE A1101	13.711	30.426	46.686	1.00	27.38	
C									
ATOM	1024	CG	PHE A1101	13.132	30.237	48.060	1.00	28.93	
C									
ATOM	1025	CD1	PHE A1101	13.920	30.418	49.191	1.00	28.95	
C									
ATOM	1026	CD2	PHE A1101	11.795	29.883	48.223	1.00	29.91	
C									
ATOM	1027	CE1	PHE A1101	13.388	30.248	50.472	1.00	29.44	
C									
ATOM	1028	CE2	PHE A1101	11.250	29.712	49.501	1.00	31.10	
C									
ATOM	1029	CZ	PHE A1101	12.055	29.896	50.627	1.00	29.58	
C									
ATOM	1030	N	VAL A1102	15.906	32.464	45.267	1.00	23.89	
N									
ATOM	1031	CA	VAL A1102	16.892	32.526	44.205	1.00	22.46	
C									
ATOM	1032	C	VAL A1102	17.889	31.440	44.601	1.00	22.33	
C									
ATOM	1033	O	VAL A1102	18.403	31.437	45.725	1.00	20.73	
O									
ATOM	1034	CB	VAL A1102	17.568	33.918	44.118	1.00	22.76	

C									
ATOM	1035	CG1	VAL	A1102	18.166	34.316	45.463	1.00	22.31
C									
ATOM	1036	CG2	VAL	A1102	18.621	33.904	43.031	1.00	23.77
C									
ATOM	1037	N	HIS	A1103	18.151	30.512	43.685	1.00	20.22
N									
ATOM	1038	CA	HIS	A1103	19.051	29.404	43.976	1.00	20.83
C									
ATOM	1039	C	HIS	A1103	20.514	29.825	44.153	1.00	20.79
C									
ATOM	1040	O	HIS	A1103	21.160	29.427	45.121	1.00	21.47
O									
ATOM	1041	CB	HIS	A1103	18.908	28.340	42.889	1.00	20.83
C									
ATOM	1042	CG	HIS	A1103	19.588	27.049	43.222	1.00	21.83
C									
ATOM	1043	ND1	HIS	A1103	20.956	26.895	43.175	1.00	22.48
N									
ATOM	1044	CD2	HIS	A1103	19.086	25.856	43.618	1.00	22.08
C									
ATOM	1045	CE1	HIS	A1103	21.270	25.658	43.525	1.00	21.60
C									
ATOM	1046	NE2	HIS	A1103	20.153	25.008	43.800	1.00	21.83
N									
ATOM	1047	N	ARG	A1104	21.024	30.627	43.220	1.00	21.21
N									
ATOM	1048	CA	ARG	A1104	22.392	31.154	43.262	1.00	21.05
C									
ATOM	1049	C	ARG	A1104	23.539	30.191	42.966	1.00	20.65
C									
ATOM	1050	O	ARG	A1104	24.678	30.627	42.802	1.00	20.84
O									
ATOM	1051	CB	ARG	A1104	22.659	31.825	44.621	1.00	21.75
C									
ATOM	1052	CG	ARG	A1104	21.754	33.017	44.925	1.00	24.07
C									
ATOM	1053	CD	ARG	A1104	22.111	33.642	46.266	1.00	24.62
C									
ATOM	1054	NE	ARG	A1104	23.485	34.123	46.265	1.00	24.77
N									
ATOM	1055	CZ	ARG	A1104	24.370	33.886	47.229	1.00	25.33
C									
ATOM	1056	NH1	ARG	A1104	24.034	33.167	48.294	1.00	26.22
N									
ATOM	1057	NH2	ARG	A1104	25.599	34.363	47.118	1.00	24.33
N									
ATOM	1058	N	ASP	A1105	23.267	28.893	42.895	1.00	19.35
N									
ATOM	1059	CA	ASP	A1105	24.346	27.951	42.632	1.00	19.45
C									
ATOM	1060	C	ASP	A1105	23.889	26.840	41.697	1.00	20.19
C									
ATOM	1061	O	ASP	A1105	24.210	25.667	41.893	1.00	19.31
O									
ATOM	1062	CB	ASP	A1105	24.869	27.382	43.964	1.00	20.07
C									
ATOM	1063	CG	ASP	A1105	26.205	26.643	43.817	1.00	20.66
C									
ATOM	1064	OD1	ASP	A1105	26.875	26.796	42.775	1.00	20.03

O									
ATOM	1065	OD2	ASP	A1105	26.594	25.919	44.757	1.00	20.30
O									
ATOM	1066	N	LEU	A1106	23.135	27.222	40.668	1.00	19.82
N									
ATOM	1067	CA	LEU	A1106	22.657	26.254	39.692	1.00	19.39
C									
ATOM	1068	C	LEU	A1106	23.838	25.815	38.830	1.00	18.29
C									
ATOM	1069	O	LEU	A1106	24.543	26.639	38.250	1.00	17.57
O									
ATOM	1070	CB	LEU	A1106	21.555	26.860	38.819	1.00	18.64
C									
ATOM	1071	CG	LEU	A1106	21.020	25.979	37.684	1.00	20.68
C									
ATOM	1072	CD1	LEU	A1106	20.622	24.607	38.216	1.00	21.87
C									
ATOM	1073	CD2	LEU	A1106	19.828	26.670	37.032	1.00	20.55
C									
ATOM	1074	N	ALA	A1107	24.037	24.506	38.761	1.00	17.03
N									
ATOM	1075	CA	ALA	A1107	25.139	23.908	38.011	1.00	18.44
C									
ATOM	1076	C	ALA	A1107	24.837	22.426	37.939	1.00	19.60
C									
ATOM	1077	O	ALA	A1107	24.084	21.911	38.763	1.00	20.20
O									
ATOM	1078	CB	ALA	A1107	26.462	24.125	38.753	1.00	16.52
C									
ATOM	1079	N	ALA	A1108	25.418	21.736	36.964	1.00	20.79
N									
ATOM	1080	CA	ALA	A1108	25.172	20.309	36.833	1.00	20.95
C									
ATOM	1081	C	ALA	A1108	25.508	19.567	38.130	1.00	21.25
C									
ATOM	1082	O	ALA	A1108	24.810	18.626	38.509	1.00	22.28
O									
ATOM	1083	CB	ALA	A1108	25.975	19.741	35.672	1.00	20.34
C									
ATOM	1084	N	ARG	A1109	26.566	19.988	38.816	1.00	21.09
N									
ATOM	1085	CA	ARG	A1109	26.962	19.324	40.055	1.00	21.19
C									
ATOM	1086	C	ARG	A1109	25.883	19.413	41.135	1.00	21.92
C									
ATOM	1087	O	ARG	A1109	25.891	18.629	42.086	1.00	21.98
O									
ATOM	1088	CB	ARG	A1109	28.263	19.929	40.599	1.00	22.23
C									
ATOM	1089	CG	ARG	A1109	28.138	21.407	40.964	1.00	20.07
C									
ATOM	1090	CD	ARG	A1109	29.361	21.943	41.695	1.00	18.83
C									
ATOM	1091	NE	ARG	A1109	29.197	23.382	41.899	1.00	19.11
N									
ATOM	1092	CZ	ARG	A1109	29.396	24.290	40.951	1.00	19.03
C									
ATOM	1093	NH1	ARG	A1109	29.788	23.904	39.741	1.00	16.64
N									
ATOM	1094	NH2	ARG	A1109	29.159	25.576	41.198	1.00	17.41

N									
ATOM	1095	N	ASN A1110	24.954	20.356	40.995	1.00	21.57	
N									
ATOM	1096	CA	ASN A1110	23.917	20.519	42.005	1.00	21.89	
C									
ATOM	1097	C	ASN A1110	22.544	19.968	41.644	1.00	22.65	
C									
ATOM	1098	O	ASN A1110	21.580	20.138	42.396	1.00	22.59	
O									
ATOM	1099	CB	ASN A1110	23.836	21.994	42.433	1.00	21.22	
C									
ATOM	1100	CG	ASN A1110	25.051	22.416	43.249	1.00	21.91	
C									
ATOM	1101	OD1	ASN A1110	25.549	21.640	44.054	1.00	20.62	
O									
ATOM	1102	ND2	ASN A1110	25.528	23.644	43.049	1.00	21.03	
N									
ATOM	1103	N	CYS A1111	22.468	19.306	40.492	1.00	22.41	
N									
ATOM	1104	CA	CYS A1111	21.242	18.664	40.035	1.00	22.34	
C									
ATOM	1105	C	CYS A1111	21.507	17.180	40.255	1.00	22.82	
C									
ATOM	1106	O	CYS A1111	22.661	16.761	40.207	1.00	21.48	
O									
ATOM	1107	CB	CYS A1111	21.005	18.927	38.546	1.00	22.08	
C									
ATOM	1108	SG	CYS A1111	20.684	20.664	38.138	1.00	22.48	
S									
ATOM	1109	N	MET A1112	20.454	16.399	40.498	1.00	23.07	
N									
ATOM	1110	CA	MET A1112	20.586	14.957	40.731	1.00	23.64	
C									
ATOM	1111	C	MET A1112	19.743	14.184	39.720	1.00	23.87	
C									
ATOM	1112	O	MET A1112	18.804	14.729	39.139	1.00	22.59	
O									
ATOM	1113	CB	MET A1112	20.123	14.591	42.144	1.00	24.75	
C									
ATOM	1114	CG	MET A1112	20.901	15.234	43.287	1.00	28.40	
C									
ATOM	1115	SD	MET A1112	22.628	14.708	43.397	1.00	33.90	
S									
ATOM	1116	CE	MET A1112	22.449	13.151	44.242	1.00	32.77	
C									
ATOM	1117	N	VAL A1113	20.077	12.912	39.519	1.00	23.78	
N									
ATOM	1118	CA	VAL A1113	19.355	12.072	38.567	1.00	24.23	
C									
ATOM	1119	C	VAL A1113	18.743	10.855	39.263	1.00	24.40	
C									
ATOM	1120	O	VAL A1113	19.441	10.088	39.929	1.00	23.04	
O									
ATOM	1121	CB	VAL A1113	20.299	11.607	37.433	1.00	25.15	
C									
ATOM	1122	CG1	VAL A1113	19.536	10.785	36.407	1.00	25.83	
C									
ATOM	1123	CG2	VAL A1113	20.935	12.826	36.770	1.00	25.48	
C									
ATOM	1124	N	ALA A1114	17.434	10.692	39.100	1.00	24.74	

N									
ATOM	1125	CA	ALA	A1114	16.706	9.591	39.712	1.00	25.51
C									
ATOM	1126	C	ALA	A1114	16.862	8.308	38.904	1.00	26.94
C									
ATOM	1127	O	ALA	A1114	17.408	8.319	37.794	1.00	27.03
O									
ATOM	1128	CB	ALA	A1114	15.222	9.955	39.837	1.00	24.11
C									
ATOM	1129	N	GLU	A1115	16.380	7.200	39.463	1.00	28.23
N									
ATOM	1130	CA	GLU	A1115	16.470	5.913	38.780	1.00	29.39
C									
ATOM	1131	C	GLU	A1115	15.940	6.005	37.351	1.00	29.85
C									
ATOM	1132	O	GLU	A1115	16.603	5.570	36.410	1.00	31.27
O									
ATOM	1133	CB	GLU	A1115	15.689	4.835	39.543	1.00	29.73
C									
ATOM	1134	CG	GLU	A1115	15.680	3.486	38.832	1.00	31.53
C									
ATOM	1135	CD	GLU	A1115	17.054	2.834	38.781	1.00	32.47
C									
ATOM	1136	OE1	GLU	A1115	17.287	2.009	37.867	1.00	33.75
O									
ATOM	1137	OE2	GLU	A1115	17.895	3.131	39.659	1.00	32.29
O									
ATOM	1138	N	ASP	A1116	14.750	6.574	37.188	1.00	30.26
N									
ATOM	1139	CA	ASP	A1116	14.154	6.696	35.864	1.00	31.33
C									
ATOM	1140	C	ASP	A1116	14.726	7.838	35.024	1.00	31.31
C									
ATOM	1141	O	ASP	A1116	14.110	8.253	34.044	1.00	31.61
O									
ATOM	1142	CB	ASP	A1116	12.630	6.847	35.975	1.00	32.10
C									
ATOM	1143	CG	ASP	A1116	12.207	8.149	36.636	1.00	33.78
C									
ATOM	1144	OD1	ASP	A1116	13.086	8.976	36.964	1.00	34.04
O									
ATOM	1145	OD2	ASP	A1116	10.985	8.344	36.827	1.00	33.69
O									
ATOM	1146	N	PHE	A1117	15.898	8.338	35.415	1.00	31.74
N									
ATOM	1147	CA	PHE	A1117	16.586	9.423	34.703	1.00	30.88
C									
ATOM	1148	C	PHE	A1117	16.012	10.830	34.848	1.00	29.97
C									
ATOM	1149	O	PHE	A1117	16.469	11.765	34.183	1.00	30.59
O									
ATOM	1150	CB	PHE	A1117	16.713	9.073	33.218	1.00	31.73
C									
ATOM	1151	CG	PHE	A1117	17.608	7.900	32.961	1.00	32.33
C									
ATOM	1152	CD1	PHE	A1117	18.981	8.009	33.143	1.00	32.68
C									
ATOM	1153	CD2	PHE	A1117	17.076	6.676	32.577	1.00	33.60
C									
ATOM	1154	CE1	PHE	A1117	19.816	6.915	32.949	1.00	33.11

C									
ATOM	1155	CE2	PHE	A1117	17.901	5.571	32.380	1.00	33.23
C									
ATOM	1156	CZ	PHE	A1117	19.276	5.694	32.566	1.00	33.90
C									
ATOM	1157	N	THR	A1118	15.016	10.990	35.707	1.00	28.01
N									
ATOM	1158	CA	THR	A1118	14.442	12.313	35.929	1.00	26.47
C									
ATOM	1159	C	THR	A1118	15.514	13.188	36.602	1.00	25.65
C									
ATOM	1160	O	THR	A1118	16.201	12.741	37.520	1.00	24.72
O									
ATOM	1161	CB	THR	A1118	13.218	12.243	36.860	1.00	26.29
C									
ATOM	1162	OG1	THR	A1118	12.186	11.460	36.242	1.00	26.39
O									
ATOM	1163	CG2	THR	A1118	12.690	13.643	37.150	1.00	24.34
C									
ATOM	1164	N	VAL	A1119	15.657	14.429	36.148	1.00	24.72
N									
ATOM	1165	CA	VAL	A1119	16.645	15.337	36.734	1.00	24.06
C									
ATOM	1166	C	VAL	A1119	15.931	16.268	37.717	1.00	23.41
C									
ATOM	1167	O	VAL	A1119	14.821	16.723	37.447	1.00	23.73
O									
ATOM	1168	CB	VAL	A1119	17.352	16.190	35.644	1.00	24.07
C									
ATOM	1169	CG1	VAL	A1119	18.417	17.080	36.287	1.00	24.18
C									
ATOM	1170	CG2	VAL	A1119	17.998	15.273	34.597	1.00	24.82
C									
ATOM	1171	N	LYS	A1120	16.563	16.544	38.854	1.00	23.15
N									
ATOM	1172	CA	LYS	A1120	15.971	17.419	39.867	1.00	23.75
C									
ATOM	1173	C	LYS	A1120	17.011	18.320	40.526	1.00	24.39
C									
ATOM	1174	O	LYS	A1120	18.186	17.944	40.643	1.00	24.12
O									
ATOM	1175	CB	LYS	A1120	15.286	16.588	40.962	1.00	23.59
C									
ATOM	1176	CG	LYS	A1120	14.268	15.572	40.450	1.00	23.89
C									
ATOM	1177	CD	LYS	A1120	13.539	14.890	41.598	1.00	24.50
C									
ATOM	1178	CE	LYS	A1120	12.626	13.796	41.063	1.00	25.14
C									
ATOM	1179	NZ	LYS	A1120	11.696	13.274	42.092	1.00	24.84
N									
ATOM	1180	N	ILE	A1121	16.571	19.505	40.954	1.00	23.48
N									
ATOM	1181	CA	ILE	A1121	17.439	20.462	41.641	1.00	25.09
C									
ATOM	1182	C	ILE	A1121	17.710	19.841	43.013	1.00	25.54
C									
ATOM	1183	O	ILE	A1121	16.764	19.509	43.730	1.00	24.51
O									
ATOM	1184	CB	ILE	A1121	16.721	21.813	41.834	1.00	24.80

C								
ATOM	1185	CG1	ILE	A1121	16.148	22.289	40.495	1.00 24.18
C								
ATOM	1186	CG2	ILE	A1121	17.680	22.829	42.438	1.00 26.21
C								
ATOM	1187	CD1	ILE	A1121	17.146	22.305	39.342	1.00 24.02
C								
ATOM	1188	N	GLY	A1122	18.977	19.690	43.391	1.00 26.26
N								
ATOM	1189	CA	GLY	A1122	19.251	19.027	44.658	1.00 29.63
C								
ATOM	1190	C	GLY	A1122	20.141	19.584	45.758	1.00 32.10
C								
ATOM	1191	O	GLY	A1122	20.239	18.955	46.823	1.00 35.77
O								
ATOM	1192	N	ASP	A1123	20.803	20.715	45.535	1.00 30.67
N								
ATOM	1193	CA	ASP	A1123	21.655	21.300	46.571	1.00 30.46
C								
ATOM	1194	C	ASP	A1123	21.189	22.744	46.729	1.00 29.67
C								
ATOM	1195	O	ASP	A1123	21.030	23.444	45.737	1.00 31.35
O								
ATOM	1196	CB	ASP	A1123	23.132	21.273	46.150	1.00 31.20
C								
ATOM	1197	CG	ASP	A1123	24.077	21.614	47.302	1.00 33.97
C								
ATOM	1198	OD1	ASP	A1123	24.497	20.680	48.027	1.00 36.06
O								
ATOM	1199	OD2	ASP	A1123	24.391	22.811	47.498	1.00 32.13
O								
ATOM	1200	N	PHE	A1124	20.969	23.188	47.962	1.00 28.63
N								
ATOM	1201	CA	PHE	A1124	20.489	24.549	48.198	1.00 28.36
C								
ATOM	1202	C	PHE	A1124	21.369	25.328	49.161	1.00 27.22
C								
ATOM	1203	O	PHE	A1124	20.891	26.202	49.880	1.00 26.52
O								
ATOM	1204	CB	PHE	A1124	19.056	24.486	48.728	1.00 29.29
C								
ATOM	1205	CG	PHE	A1124	18.145	23.676	47.857	1.00 30.50
C								
ATOM	1206	CD1	PHE	A1124	17.588	24.229	46.707	1.00 31.13
C								
ATOM	1207	CD2	PHE	A1124	17.914	22.334	48.135	1.00 30.08
C								
ATOM	1208	CE1	PHE	A1124	16.815	23.449	45.843	1.00 30.62
C								
ATOM	1209	CE2	PHE	A1124	17.148	21.550	47.279	1.00 30.60
C								
ATOM	1210	CZ	PHE	A1124	16.599	22.107	46.133	1.00 29.59
C								
ATOM	1211	N	GLY	A1125	22.658	25.010	49.158	1.00 26.48
N								
ATOM	1212	CA	GLY	A1125	23.588	25.671	50.053	1.00 27.04
C								
ATOM	1213	C	GLY	A1125	23.627	27.184	49.958	1.00 27.00
C								
ATOM	1214	O	GLY	A1125	23.889	27.844	50.956	1.00 28.24

O									
ATOM	1215	N	MET	A1126	23.360	27.742	48.779	1.00	26.36
N									
ATOM	1216	CA	MET	A1126	23.404	29.194	48.605	1.00	26.38
C									
ATOM	1217	C	MET	A1126	22.044	29.839	48.351	1.00	26.17
C									
ATOM	1218	O	MET	A1126	21.961	31.047	48.120	1.00	25.93
O									
ATOM	1219	CB	MET	A1126	24.362	29.544	47.457	1.00	26.71
C									
ATOM	1220	CG	MET	A1126	25.823	29.224	47.750	1.00	26.48
C									
ATOM	1221	SD	MET	A1126	26.935	29.516	46.352	1.00	25.11
S									
ATOM	1222	CE	MET	A1126	26.534	31.258	45.914	1.00	27.70
C									
ATOM	1223	N	THR	A1127	20.987	29.035	48.395	1.00	25.44
N									
ATOM	1224	CA	THR	A1127	19.628	29.519	48.155	1.00	25.77
C									
ATOM	1225	C	THR	A1127	19.203	30.585	49.160	1.00	26.86
C									
ATOM	1226	O	THR	A1127	19.430	30.448	50.365	1.00	26.41
O									
ATOM	1227	CB	THR	A1127	18.616	28.350	48.196	1.00	24.49
C									
ATOM	1228	OG1	THR	A1127	18.958	27.390	47.187	1.00	23.51
O									
ATOM	1229	CG2	THR	A1127	17.197	28.851	47.949	1.00	24.91
C									
ATOM	1230	N	ARG	A1128	18.578	31.647	48.656	1.00	27.56
N									
ATOM	1231	CA	ARG	A1128	18.131	32.748	49.497	1.00	29.70
C									
ATOM	1232	C	ARG	A1128	16.701	33.194	49.211	1.00	30.71
C									
ATOM	1233	O	ARG	A1128	16.251	33.224	48.067	1.00	28.23
O									
ATOM	1234	CB	ARG	A1128	19.056	33.956	49.317	1.00	30.44
C									
ATOM	1235	CG	ARG	A1128	20.480	33.733	49.775	1.00	31.81
C									
ATOM	1236	CD	ARG	A1128	20.565	33.720	51.297	1.00	34.73
C									
ATOM	1237	NE	ARG	A1128	21.938	33.543	51.759	1.00	35.75
N									
ATOM	1238	CZ	ARG	A1128	22.593	32.389	51.733	1.00	37.51
C									
ATOM	1239	NH1	ARG	A1128	21.999	31.297	51.273	1.00	37.95
N									
ATOM	1240	NH2	ARG	A1128	23.849	32.329	52.156	1.00	38.13
N									
ATOM	1241	N	ASP	A1129	15.993	33.549	50.272	1.00	32.00
N									
ATOM	1242	CA	ASP	A1129	14.629	34.028	50.142	1.00	34.71
C									
ATOM	1243	C	ASP	A1129	14.685	35.470	49.626	1.00	34.74
C									
ATOM	1244	O	ASP	A1129	15.422	36.291	50.162	1.00	34.82

O									
ATOM	1245	CB	ASP	A1129	13.942	33.950	51.508	1.00	36.26
C									
ATOM	1246	CG	ASP	A1129	12.658	34.733	51.559	1.00	38.18
C									
ATOM	1247	OD1	ASP	A1129	11.850	34.629	50.613	1.00	38.45
O									
ATOM	1248	OD2	ASP	A1129	12.458	35.449	52.560	1.00	40.73
O									
ATOM	1249	N	ILE	A1130	13.921	35.772	48.579	1.00	35.41
N									
ATOM	1250	CA	ILE	A1130	13.897	37.122	48.006	1.00	36.11
C									
ATOM	1251	C	ILE	A1130	12.477	37.691	47.982	1.00	37.60
C									
ATOM	1252	O	ILE	A1130	12.165	38.588	47.196	1.00	37.46
O									
ATOM	1253	CB	ILE	A1130	14.440	37.139	46.555	1.00	35.24
C									
ATOM	1254	CG1	ILE	A1130	13.631	36.170	45.687	1.00	34.42
C									
ATOM	1255	CG2	ILE	A1130	15.921	36.788	46.546	1.00	34.41
C									
ATOM	1256	CD1	ILE	A1130	13.893	36.295	44.191	1.00	33.92
C									
HETATM	1257	N	PTR	A1131	11.623	37.159	48.845	1.00	39.53
N									
HETATM	1258	CA	PTR	A1131	10.237	37.596	48.927	1.00	42.03
C									
HETATM	1259	C	PTR	A1131	10.094	39.112	49.040	1.00	42.46
C									
HETATM	1260	O	PTR	A1131	9.355	39.738	48.278	1.00	41.84
O									
HETATM	1261	CB	PTR	A1131	9.567	36.929	50.130	1.00	45.24
C									
HETATM	1262	CG	PTR	A1131	8.171	37.424	50.425	1.00	49.18
C									
HETATM	1263	CD1	PTR	A1131	7.139	37.257	49.503	1.00	51.15
C									
HETATM	1264	CD2	PTR	A1131	7.879	38.051	51.637	1.00	50.90
C									
HETATM	1265	CE1	PTR	A1131	5.846	37.702	49.781	1.00	53.14
C									
HETATM	1266	CE2	PTR	A1131	6.593	38.497	51.925	1.00	53.22
C									
HETATM	1267	CZ	PTR	A1131	5.581	38.320	50.996	1.00	54.72
C									
HETATM	1268	OH	PTR	A1131	4.311	38.762	51.305	1.00	58.56
O									
HETATM	1269	P	PTR	A1131	2.960	38.800	50.371	1.00	61.12
P									
HETATM	1270	O1P	PTR	A1131	3.314	39.751	49.278	1.00	60.54
O									
HETATM	1271	O2P	PTR	A1131	1.955	39.295	51.345	1.00	60.74
O									
HETATM	1272	O3P	PTR	A1131	2.773	37.387	49.932	1.00	60.89
O									
ATOM	1273	N	GLU	A1132	10.808	39.697	49.992	1.00	42.33
N									
ATOM	1274	CA	GLU	A1132	10.731	41.131	50.225	1.00	43.58

C									
ATOM	1275	C	GLU	A1132	11.323	42.044	49.150	1.00	43.59
C									
ATOM	1276	O	GLU	A1132	10.659	42.977	48.701	1.00	44.46
O									
ATOM	1277	CB	GLU	A1132	11.374	41.468	51.576	1.00	43.91
C									
ATOM	1278	N	THR	A1133	12.558	41.780	48.731	1.00	42.98
N									
ATOM	1279	CA	THR	A1133	13.220	42.647	47.760	1.00	42.14
C									
ATOM	1280	C	THR	A1133	13.437	42.143	46.334	1.00	41.86
C									
ATOM	1281	O	THR	A1133	13.878	42.907	45.480	1.00	41.49
O									
ATOM	1282	CB	THR	A1133	14.594	43.084	48.291	1.00	42.52
C									
ATOM	1283	OG1	THR	A1133	15.448	41.938	48.389	1.00	42.13
O									
ATOM	1284	CG2	THR	A1133	14.457	43.718	49.668	1.00	42.30
C									
ATOM	1285	N	ASP	A1134	13.143	40.874	46.070	1.00	41.46
N									
ATOM	1286	CA	ASP	A1134	13.336	40.322	44.730	1.00	41.09
C									
ATOM	1287	C	ASP	A1134	14.797	40.169	44.323	1.00	40.14
C									
ATOM	1288	O	ASP	A1134	15.094	39.918	43.153	1.00	38.86
O									
ATOM	1289	CB	ASP	A1134	12.627	41.181	43.681	1.00	42.10
C									
ATOM	1290	CG	ASP	A1134	11.215	40.717	43.405	1.00	42.65
C									
ATOM	1291	OD1	ASP	A1134	10.504	41.418	42.657	1.00	43.77
O									
ATOM	1292	OD2	ASP	A1134	10.820	39.651	43.927	1.00	44.33
O									
HETATM	1293	N	PTR	A1135	15.711	40.325	45.272	1.00	39.19
N									
HETATM	1294	CA	PTR	A1135	17.123	40.169	44.959	1.00	39.21
C									
HETATM	1295	C	PTR	A1135	17.918	39.888	46.214	1.00	39.09
C									
HETATM	1296	O	PTR	A1135	17.431	40.089	47.327	1.00	37.71
O									
HETATM	1297	CB	PTR	A1135	17.671	41.423	44.256	1.00	40.73
C									
HETATM	1298	CG	PTR	A1135	17.998	42.595	45.169	1.00	42.86
C									
HETATM	1299	CD1	PTR	A1135	19.220	42.665	45.839	1.00	43.96
C									
HETATM	1300	CD2	PTR	A1135	17.085	43.631	45.361	1.00	44.31
C									
HETATM	1301	CE1	PTR	A1135	19.527	43.742	46.680	1.00	45.50
C									
HETATM	1302	CE2	PTR	A1135	17.379	44.711	46.199	1.00	45.17
C									
HETATM	1303	CZ	PTR	A1135	18.600	44.760	46.855	1.00	45.89
C									
HETATM	1304	OH	PTR	A1135	18.887	45.826	47.690	1.00	47.29

O									
HETATM	1305	P	PTR	A1135	20.096	46.933	47.510	1.00	47.95
P									
HETATM	1306	O1P	PTR	A1135	21.238	46.297	48.213	1.00	46.60
O									
HETATM	1307	O2P	PTR	A1135	19.528	48.125	48.200	1.00	48.05
O									
HETATM	1308	O3P	PTR	A1135	20.249	47.089	46.043	1.00	46.43
O									
HETATM	1309	N	PTR	A1136	19.143	39.411	46.022	1.00	38.73
N									
HETATM	1310	CA	PTR	A1136	20.042	39.127	47.128	1.00	39.15
C									
HETATM	1311	C	PTR	A1136	21.402	39.693	46.762	1.00	39.90
C									
HETATM	1312	O	PTR	A1136	21.923	39.423	45.680	1.00	39.58
O									
HETATM	1313	CB	PTR	A1136	20.173	37.621	47.377	1.00	38.50
C									
HETATM	1314	CG	PTR	A1136	21.263	37.299	48.381	1.00	38.40
C									
HETATM	1315	CD1	PTR	A1136	21.028	37.389	49.755	1.00	38.33
C									
HETATM	1316	CD2	PTR	A1136	22.549	36.965	47.955	1.00	37.94
C									
HETATM	1317	CE1	PTR	A1136	22.053	37.157	50.677	1.00	39.61
C									
HETATM	1318	CE2	PTR	A1136	23.572	36.734	48.862	1.00	39.51
C									
HETATM	1319	CZ	PTR	A1136	23.323	36.831	50.221	1.00	40.38
C									
HETATM	1320	OH	PTR	A1136	24.364	36.618	51.100	1.00	42.88
O									
HETATM	1321	P	PTR	A1136	24.436	36.484	52.729	1.00	45.09
P									
HETATM	1322	O1P	PTR	A1136	23.834	37.747	53.238	1.00	43.98
O									
HETATM	1323	O2P	PTR	A1136	25.906	36.362	52.888	1.00	44.77
O									
HETATM	1324	O3P	PTR	A1136	23.663	35.270	53.070	1.00	44.10
O									
ATOM	1325	N	ARG	A1137	21.974	40.484	47.662	1.00	40.96
N									
ATOM	1326	CA	ARG	A1137	23.284	41.074	47.421	1.00	42.17
C									
ATOM	1327	C	ARG	A1137	24.293	40.457	48.381	1.00	42.46
C									
ATOM	1328	O	ARG	A1137	24.097	40.462	49.598	1.00	42.30
O									
ATOM	1329	CB	ARG	A1137	23.245	42.593	47.623	1.00	42.73
C									
ATOM	1330	CG	ARG	A1137	24.573	43.290	47.324	1.00	44.62
C									
ATOM	1331	CD	ARG	A1137	24.535	44.765	47.715	1.00	45.62
C									
ATOM	1332	NE	ARG	A1137	23.571	45.523	46.923	1.00	45.60
N									
ATOM	1333	CZ	ARG	A1137	23.775	45.912	45.670	1.00	46.03
C									
ATOM	1334	NH1	ARG	A1137	24.915	45.622	45.060	1.00	46.49

N									
ATOM	1335	NH2	ARG	A1137	22.836	46.589	45.023	1.00	46.81
N									
ATOM	1336	N	LYS	A1138	25.371	39.917	47.827	1.00	42.70
N									
ATOM	1337	CA	LYS	A1138	26.409	39.302	48.641	1.00	42.66
C									
ATOM	1338	C	LYS	A1138	27.364	40.376	49.144	1.00	42.78
C									
ATOM	1339	O	LYS	A1138	27.872	41.181	48.364	1.00	41.86
O									
ATOM	1340	CB	LYS	A1138	27.181	38.268	47.818	1.00	42.89
C									
ATOM	1341	CG	LYS	A1138	28.347	37.632	48.556	1.00	43.04
C									
ATOM	1342	CD	LYS	A1138	27.878	36.875	49.786	1.00	44.05
C									
ATOM	1343	CE	LYS	A1138	29.066	36.382	50.601	1.00	45.08
C									
ATOM	1344	NZ	LYS	A1138	28.634	35.641	51.812	1.00	45.65
N									
ATOM	1345	N	GLY	A1139	27.603	40.388	50.450	1.00	43.27
N									
ATOM	1346	CA	GLY	A1139	28.506	41.370	51.021	1.00	44.63
C									
ATOM	1347	C	GLY	A1139	29.804	40.756	51.517	1.00	45.15
C									
ATOM	1348	O	GLY	A1139	29.813	39.642	52.047	1.00	45.65
O									
ATOM	1349	N	GLY	A1140	30.907	41.477	51.335	1.00	45.78
N									
ATOM	1350	CA	GLY	A1140	32.196	40.986	51.793	1.00	45.89
C									
ATOM	1351	C	GLY	A1140	32.851	39.950	50.898	1.00	46.07
C									
ATOM	1352	O	GLY	A1140	32.688	39.967	49.675	1.00	46.07
O									
ATOM	1353	N	LYS	A1141	33.599	39.043	51.518	1.00	45.30
N									
ATOM	1354	CA	LYS	A1141	34.296	37.987	50.792	1.00	44.44
C									
ATOM	1355	C	LYS	A1141	33.475	36.704	50.795	1.00	42.66
C									
ATOM	1356	O	LYS	A1141	32.599	36.520	51.642	1.00	42.95
O									
ATOM	1357	CB	LYS	A1141	35.651	37.700	51.443	1.00	45.50
C									
ATOM	1358	CG	LYS	A1141	36.554	38.909	51.590	1.00	47.72
C									
ATOM	1359	CD	LYS	A1141	37.865	38.522	52.258	1.00	49.40
C									
ATOM	1360	CE	LYS	A1141	38.715	39.744	52.565	1.00	50.57
C									
ATOM	1361	NZ	LYS	A1141	39.983	39.370	53.254	1.00	52.71
N									
ATOM	1362	N	GLY	A1142	33.767	35.821	49.846	1.00	40.74
N									
ATOM	1363	CA	GLY	A1142	33.058	34.558	49.769	1.00	38.78
C									
ATOM	1364	C	GLY	A1142	33.561	33.670	48.647	1.00	37.54

C								
ATOM	1365	O	GLY A1142	34.132	34.150	47.666	1.00	37.38
O								
ATOM	1366	N	LEU A1143	33.373	32.365	48.800	1.00	35.89
N								
ATOM	1367	CA	LEU A1143	33.784	31.416	47.772	1.00	34.26
C								
ATOM	1368	C	LEU A1143	32.541	31.229	46.906	1.00	33.66
C								
ATOM	1369	O	LEU A1143	31.576	30.579	47.318	1.00	32.21
O								
ATOM	1370	CB	LEU A1143	34.209	30.089	48.405	1.00	33.34
C								
ATOM	1371	CG	LEU A1143	35.381	30.151	49.394	1.00	33.48
C								
ATOM	1372	CD1	LEU A1143	35.719	28.738	49.864	1.00	33.87
C								
ATOM	1373	CD2	LEU A1143	36.593	30.782	48.730	1.00	32.08
C								
ATOM	1374	N	LEU A1144	32.568	31.810	45.711	1.00	32.55
N								
ATOM	1375	CA	LEU A1144	31.427	31.744	44.807	1.00	31.61
C								
ATOM	1376	C	LEU A1144	31.738	31.041	43.500	1.00	29.52
C								
ATOM	1377	O	LEU A1144	32.880	31.043	43.041	1.00	28.87
O								
ATOM	1378	CB	LEU A1144	30.916	33.160	44.524	1.00	32.42
C								
ATOM	1379	CG	LEU A1144	30.440	33.915	45.766	1.00	33.65
C								
ATOM	1380	CD1	LEU A1144	30.035	35.338	45.399	1.00	34.15
C								
ATOM	1381	CD2	LEU A1144	29.275	33.172	46.383	1.00	34.78
C								
ATOM	1382	N	PRO A1145	30.711	30.430	42.883	1.00	28.32
N								
ATOM	1383	CA	PRO A1145	30.807	29.697	41.617	1.00	27.00
C								
ATOM	1384	C	PRO A1145	30.961	30.638	40.428	1.00	27.28
C								
ATOM	1385	O	PRO A1145	30.061	30.759	39.592	1.00	26.30
O								
ATOM	1386	CB	PRO A1145	29.501	28.913	41.583	1.00	26.78
C								
ATOM	1387	CG	PRO A1145	28.539	29.875	42.228	1.00	27.57
C								
ATOM	1388	CD	PRO A1145	29.332	30.378	43.412	1.00	27.18
C								
ATOM	1389	N	VAL A1146	32.119	31.294	40.366	1.00	25.54
N								
ATOM	1390	CA	VAL A1146	32.440	32.252	39.314	1.00	26.17
C								
ATOM	1391	C	VAL A1146	32.111	31.863	37.873	1.00	25.07
C								
ATOM	1392	O	VAL A1146	31.586	32.685	37.122	1.00	26.03
O								
ATOM	1393	CB	VAL A1146	33.941	32.646	39.376	1.00	26.12
C								
ATOM	1394	CG1	VAL A1146	34.366	33.302	38.077	1.00	25.69

C									
ATOM	1395	CG2	VAL	A1146	34.174	33.597	40.541	1.00	26.52
C									
ATOM	1396	N	ARG	A1147	32.417	30.628	37.482	1.00	24.22
N									
ATOM	1397	CA	ARG	A1147	32.165	30.185	36.110	1.00	23.21
C									
ATOM	1398	C	ARG	A1147	30.701	29.933	35.766	1.00	22.32
C									
ATOM	1399	O	ARG	A1147	30.383	29.599	34.632	1.00	21.76
O									
ATOM	1400	CB	ARG	A1147	32.993	28.933	35.798	1.00	24.37
C									
ATOM	1401	CG	ARG	A1147	34.501	29.196	35.798	1.00	24.78
C									
ATOM	1402	CD	ARG	A1147	35.329	27.916	35.716	1.00	26.53
C									
ATOM	1403	NE	ARG	A1147	36.729	28.177	36.064	1.00	28.56
N									
ATOM	1404	CZ	ARG	A1147	37.713	28.353	35.187	1.00	28.84
C									
ATOM	1405	NH1	ARG	A1147	37.471	28.288	33.888	1.00	29.87
N									
ATOM	1406	NH2	ARG	A1147	38.942	28.618	35.612	1.00	30.97
N									
ATOM	1407	N	TRP	A1148	29.816	30.101	36.742	1.00	22.02
N									
ATOM	1408	CA	TRP	A1148	28.379	29.892	36.535	1.00	22.03
C									
ATOM	1409	C	TRP	A1148	27.602	31.191	36.805	1.00	22.08
C									
ATOM	1410	O	TRP	A1148	26.384	31.242	36.636	1.00	22.40
O									
ATOM	1411	CB	TRP	A1148	27.870	28.781	37.475	1.00	21.28
C									
ATOM	1412	CG	TRP	A1148	28.182	27.364	37.015	1.00	21.41
C									
ATOM	1413	CD1	TRP	A1148	27.359	26.536	36.303	1.00	19.85
C									
ATOM	1414	CD2	TRP	A1148	29.423	26.654	37.170	1.00	21.72
C									
ATOM	1415	NE1	TRP	A1148	28.007	25.364	35.999	1.00	22.04
N									
ATOM	1416	CE2	TRP	A1148	29.275	25.409	36.516	1.00	21.25
C									
ATOM	1417	CE3	TRP	A1148	30.645	26.952	37.789	1.00	21.59
C									
ATOM	1418	CZ2	TRP	A1148	30.306	24.460	36.465	1.00	21.60
C									
ATOM	1419	CZ3	TRP	A1148	31.671	26.003	37.735	1.00	21.09
C									
ATOM	1420	CH2	TRP	A1148	31.492	24.775	37.078	1.00	21.30
C									
ATOM	1421	N	MET	A1149	28.313	32.236	37.220	1.00	21.95
N									
ATOM	1422	CA	MET	A1149	27.696	33.518	37.559	1.00	21.21
C									
ATOM	1423	C	MET	A1149	27.503	34.517	36.423	1.00	20.65
C									
ATOM	1424	O	MET	A1149	28.342	34.649	35.542	1.00	19.63

O									
ATOM	1425	CB	MET	A1149	28.492	34.177	38.685	1.00	21.34
C									
ATOM	1426	CG	MET	A1149	28.245	33.556	40.057	1.00	23.81
C									
ATOM	1427	SD	MET	A1149	29.563	33.946	41.227	1.00	24.28
S									
ATOM	1428	CE	MET	A1149	29.232	35.680	41.536	1.00	22.44
C									
ATOM	1429	N	SER	A1150	26.383	35.229	36.459	1.00	20.62
N									
ATOM	1430	CA	SER	A1150	26.077	36.221	35.433	1.00	21.91
C									
ATOM	1431	C	SER	A1150	27.050	37.398	35.535	1.00	23.22
C									
ATOM	1432	O	SER	A1150	27.753	37.558	36.536	1.00	23.28
O									
ATOM	1433	CB	SER	A1150	24.648	36.746	35.614	1.00	21.94
C									
ATOM	1434	OG	SER	A1150	24.567	37.582	36.757	1.00	20.51
O									
ATOM	1435	N	PRO	A1151	27.108	38.231	34.489	1.00	23.80
N									
ATOM	1436	CA	PRO	A1151	27.998	39.393	34.488	1.00	24.00
C									
ATOM	1437	C	PRO	A1151	27.698	40.346	35.646	1.00	24.99
C									
ATOM	1438	O	PRO	A1151	28.615	40.821	36.322	1.00	24.78
O									
ATOM	1439	CB	PRO	A1151	27.724	40.026	33.129	1.00	24.25
C									
ATOM	1440	CG	PRO	A1151	27.457	38.830	32.270	1.00	23.52
C									
ATOM	1441	CD	PRO	A1151	26.538	38.011	33.146	1.00	23.44
C									
ATOM	1442	N	GLU	A1152	26.418	40.621	35.882	1.00	26.35
N									
ATOM	1443	CA	GLU	A1152	26.044	41.534	36.962	1.00	27.19
C									
ATOM	1444	C	GLU	A1152	26.393	40.978	38.342	1.00	27.86
C									
ATOM	1445	O	GLU	A1152	26.744	41.738	39.251	1.00	27.76
O									
ATOM	1446	CB	GLU	A1152	24.546	41.861	36.907	1.00	27.85
C									
ATOM	1447	CG	GLU	A1152	23.627	40.684	37.224	1.00	27.45
C									
ATOM	1448	CD	GLU	A1152	23.235	39.891	35.998	1.00	27.50
C									
ATOM	1449	OE1	GLU	A1152	23.916	40.020	34.957	1.00	28.04
O									
ATOM	1450	OE2	GLU	A1152	22.249	39.129	36.078	1.00	26.69
O									
ATOM	1451	N	SER	A1153	26.290	39.657	38.502	1.00	27.90
N									
ATOM	1452	CA	SER	A1153	26.611	39.014	39.776	1.00	28.81
C									
ATOM	1453	C	SER	A1153	28.112	39.096	40.015	1.00	29.24
C									
ATOM	1454	O	SER	A1153	28.560	39.363	41.124	1.00	29.44

O									
ATOM	1455	CB	SER	A1153	26.187	37.537	39.773	1.00	28.63
C									
ATOM	1456	OG	SER	A1153	24.779	37.400	39.738	1.00	27.87
O									
ATOM	1457	N	LEU	A1154	28.887	38.857	38.965	1.00	31.33
N									
ATOM	1458	CA	LEU	A1154	30.333	38.918	39.082	1.00	32.30
C									
ATOM	1459	C	LEU	A1154	30.764	40.343	39.415	1.00	34.21
C									
ATOM	1460	O	LEU	A1154	31.722	40.553	40.158	1.00	34.22
O									
ATOM	1461	CB	LEU	A1154	30.994	38.483	37.773	1.00	31.82
C									
ATOM	1462	CG	LEU	A1154	30.936	37.012	37.353	1.00	31.01
C									
ATOM	1463	CD1	LEU	A1154	31.453	36.882	35.937	1.00	30.51
C									
ATOM	1464	CD2	LEU	A1154	31.760	36.155	38.309	1.00	31.14
C									
ATOM	1465	N	LYS	A1155	30.046	41.321	38.871	1.00	35.41
N									
ATOM	1466	CA	LYS	A1155	30.396	42.718	39.092	1.00	37.26
C									
ATOM	1467	C	LYS	A1155	30.067	43.282	40.474	1.00	37.90
C									
ATOM	1468	O	LYS	A1155	30.910	43.930	41.088	1.00	39.01
O									
ATOM	1469	CB	LYS	A1155	29.759	43.599	38.012	1.00	38.43
C									
ATOM	1470	CG	LYS	A1155	30.502	44.917	37.819	1.00	42.06
C									
ATOM	1471	CD	LYS	A1155	29.870	45.811	36.758	1.00	43.61
C									
ATOM	1472	CE	LYS	A1155	28.624	46.501	37.285	1.00	46.15
C									
ATOM	1473	NZ	LYS	A1155	28.123	47.538	36.335	1.00	46.94
N									
ATOM	1474	N	ASP	A1156	28.858	43.050	40.974	1.00	38.49
N									
ATOM	1475	CA	ASP	A1156	28.502	43.581	42.287	1.00	39.27
C									
ATOM	1476	C	ASP	A1156	27.768	42.629	43.227	1.00	38.06
C									
ATOM	1477	O	ASP	A1156	27.036	43.064	44.120	1.00	37.93
O									
ATOM	1478	CB	ASP	A1156	27.703	44.879	42.126	1.00	41.62
C									
ATOM	1479	CG	ASP	A1156	26.924	44.922	40.835	1.00	44.42
C									
ATOM	1480	OD1	ASP	A1156	26.005	44.091	40.666	1.00	47.33
O									
ATOM	1481	OD2	ASP	A1156	27.240	45.783	39.984	1.00	45.06
O									
ATOM	1482	N	GLY	A1157	27.968	41.331	43.020	1.00	36.85
N									
ATOM	1483	CA	GLY	A1157	27.353	40.331	43.878	1.00	35.19
C									
ATOM	1484	C	GLY	A1157	25.843	40.336	44.027	1.00	33.92

C									
ATOM	1485	O	GLY	A1157	25.327	39.908	45.059	1.00	33.36
O									
ATOM	1486	N	VAL	A1158	25.127	40.804	43.008	1.00	32.96
N									
ATOM	1487	CA	VAL	A1158	23.668	40.825	43.066	1.00	32.37
C									
ATOM	1488	C	VAL	A1158	23.104	39.576	42.378	1.00	30.55
C									
ATOM	1489	O	VAL	A1158	23.466	39.256	41.243	1.00	30.52
O									
ATOM	1490	CB	VAL	A1158	23.099	42.104	42.394	1.00	33.85
C									
ATOM	1491	CG1	VAL	A1158	23.366	42.081	40.902	1.00	34.94
C									
ATOM	1492	CG2	VAL	A1158	21.617	42.225	42.674	1.00	35.56
C									
ATOM	1493	N	PHE	A1159	22.222	38.867	43.076	1.00	29.06
N									
ATOM	1494	CA	PHE	A1159	21.616	37.654	42.539	1.00	27.66
C									
ATOM	1495	C	PHE	A1159	20.103	37.799	42.414	1.00	26.79
C									
ATOM	1496	O	PHE	A1159	19.435	38.200	43.359	1.00	25.96
O									
ATOM	1497	CB	PHE	A1159	21.942	36.451	43.435	1.00	25.78
C									
ATOM	1498	CG	PHE	A1159	23.409	36.099	43.480	1.00	26.78
C									
ATOM	1499	CD1	PHE	A1159	24.306	36.869	44.213	1.00	26.61
C									
ATOM	1500	CD2	PHE	A1159	23.892	34.993	42.789	1.00	25.51
C									
ATOM	1501	CE1	PHE	A1159	25.663	36.542	44.256	1.00	25.91
C									
ATOM	1502	CE2	PHE	A1159	25.244	34.658	42.825	1.00	26.91
C									
ATOM	1503	CZ	PHE	A1159	26.135	35.435	43.562	1.00	25.20
C									
ATOM	1504	N	THR	A1160	19.577	37.459	41.241	1.00	25.52
N									
ATOM	1505	CA	THR	A1160	18.146	37.555	40.964	1.00	25.74
C									
ATOM	1506	C	THR	A1160	17.698	36.305	40.221	1.00	24.38
C									
ATOM	1507	O	THR	A1160	18.516	35.461	39.881	1.00	24.42
O									
ATOM	1508	CB	THR	A1160	17.846	38.728	40.028	1.00	25.44
C									
ATOM	1509	OG1	THR	A1160	18.443	38.458	38.758	1.00	26.76
O									
ATOM	1510	CG2	THR	A1160	18.422	40.034	40.573	1.00	25.40
C									
ATOM	1511	N	THR	A1161	16.397	36.190	39.964	1.00	24.58
N									
ATOM	1512	CA	THR	A1161	15.901	35.054	39.204	1.00	24.19
C									
ATOM	1513	C	THR	A1161	16.585	35.134	37.836	1.00	23.61
C									
ATOM	1514	O	THR	A1161	16.790	34.113	37.180	1.00	22.54

O									
ATOM	1515	CB	THR	A1161	14.367	35.105	39.003	1.00	25.24
C									
ATOM	1516	OG1	THR	A1161	14.015	36.276	38.255	1.00	26.83
O									
ATOM	1517	CG2	THR	A1161	13.655	35.139	40.345	1.00	25.51
C									
ATOM	1518	N	TYR	A1162	16.944	36.352	37.420	1.00	22.79
N									
ATOM	1519	CA	TYR	A1162	17.611	36.558	36.132	1.00	23.33
C									
ATOM	1520	C	TYR	A1162	18.991	35.914	36.121	1.00	21.37
C									
ATOM	1521	O	TYR	A1162	19.388	35.324	35.125	1.00	19.55
O									
ATOM	1522	CB	TYR	A1162	17.799	38.048	35.811	1.00	26.24
C									
ATOM	1523	CG	TYR	A1162	16.588	38.920	36.012	1.00	31.15
C									
ATOM	1524	CD1	TYR	A1162	15.338	38.546	35.517	1.00	32.33
C									
ATOM	1525	CD2	TYR	A1162	16.700	40.140	36.683	1.00	32.29
C									
ATOM	1526	CE1	TYR	A1162	14.220	39.372	35.686	1.00	35.37
C									
ATOM	1527	CE2	TYR	A1162	15.595	40.972	36.856	1.00	35.36
C									
ATOM	1528	CZ	TYR	A1162	14.359	40.584	36.356	1.00	36.14
C									
ATOM	1529	OH	TYR	A1162	13.274	41.415	36.524	1.00	38.51
O									
ATOM	1530	N	SER	A1163	19.729	36.032	37.221	1.00	20.36
N									
ATOM	1531	CA	SER	A1163	21.053	35.425	37.252	1.00	20.66
C									
ATOM	1532	C	SER	A1163	20.925	33.910	37.364	1.00	19.20
C									
ATOM	1533	O	SER	A1163	21.821	33.193	36.963	1.00	20.57
O									
ATOM	1534	CB	SER	A1163	21.913	36.009	38.388	1.00	20.41
C									
ATOM	1535	OG	SER	A1163	21.261	35.950	39.638	1.00	20.56
O									
ATOM	1536	N	ASP	A1164	19.809	33.421	37.904	1.00	19.83
N									
ATOM	1537	CA	ASP	A1164	19.584	31.975	37.994	1.00	18.38
C									
ATOM	1538	C	ASP	A1164	19.384	31.483	36.553	1.00	18.45
C									
ATOM	1539	O	ASP	A1164	19.806	30.386	36.183	1.00	17.16
O									
ATOM	1540	CB	ASP	A1164	18.316	31.653	38.797	1.00	18.06
C									
ATOM	1541	CG	ASP	A1164	18.572	31.457	40.287	1.00	18.68
C									
ATOM	1542	OD1	ASP	A1164	19.745	31.451	40.725	1.00	18.00
O									
ATOM	1543	OD2	ASP	A1164	17.572	31.297	41.025	1.00	17.03
O									
ATOM	1544	N	VAL	A1165	18.735	32.303	35.735	1.00	18.36

N									
ATOM	1545	CA	VAL	A1165	18.497	31.926	34.347	1.00	17.43
C									
ATOM	1546	C	VAL	A1165	19.826	31.879	33.592	1.00	18.58
C									
ATOM	1547	O	VAL	A1165	20.013	31.043	32.706	1.00	18.39
O									
ATOM	1548	CB	VAL	A1165	17.504	32.902	33.670	1.00	17.29
C									
ATOM	1549	CG1	VAL	A1165	17.495	32.693	32.160	1.00	16.72
C									
ATOM	1550	CG2	VAL	A1165	16.095	32.657	34.223	1.00	14.96
C									
ATOM	1551	N	TRP	A1166	20.748	32.773	33.946	1.00	17.75
N									
ATOM	1552	CA	TRP	A1166	22.067	32.776	33.316	1.00	18.72
C									
ATOM	1553	C	TRP	A1166	22.749	31.436	33.592	1.00	18.21
C									
ATOM	1554	O	TRP	A1166	23.264	30.791	32.677	1.00	18.45
O									
ATOM	1555	CB	TRP	A1166	22.939	33.906	33.874	1.00	18.75
C									
ATOM	1556	CG	TRP	A1166	24.350	33.875	33.352	1.00	20.20
C									
ATOM	1557	CD1	TRP	A1166	25.360	33.041	33.754	1.00	20.58
C									
ATOM	1558	CD2	TRP	A1166	24.884	34.663	32.283	1.00	20.50
C									
ATOM	1559	NE1	TRP	A1166	26.484	33.262	32.996	1.00	20.05
N									
ATOM	1560	CE2	TRP	A1166	26.220	34.253	32.087	1.00	21.51
C									
ATOM	1561	CE3	TRP	A1166	24.361	35.680	31.469	1.00	20.80
C									
ATOM	1562	CZ2	TRP	A1166	27.047	34.822	31.107	1.00	21.96
C									
ATOM	1563	CZ3	TRP	A1166	25.179	36.246	30.496	1.00	22.00
C									
ATOM	1564	CH2	TRP	A1166	26.509	35.813	30.324	1.00	22.50
C									
ATOM	1565	N	SER	A1167	22.753	31.030	34.860	1.00	17.58
N									
ATOM	1566	CA	SER	A1167	23.370	29.764	35.266	1.00	17.66
C									
ATOM	1567	C	SER	A1167	22.712	28.584	34.570	1.00	17.54
C									
ATOM	1568	O	SER	A1167	23.379	27.614	34.226	1.00	17.89
O									
ATOM	1569	CB	SER	A1167	23.273	29.585	36.780	1.00	17.37
C									
ATOM	1570	OG	SER	A1167	23.954	30.631	37.444	1.00	20.33
O									
ATOM	1571	N	PHE	A1168	21.399	28.659	34.369	1.00	17.45
N									
ATOM	1572	CA	PHE	A1168	20.687	27.587	33.674	1.00	18.21
C									
ATOM	1573	C	PHE	A1168	21.314	27.457	32.280	1.00	18.08
C									
ATOM	1574	O	PHE	A1168	21.484	26.354	31.757	1.00	17.75

O									
ATOM	1575	CB	PHE	A1168	19.198	27.934	33.561	1.00	19.12
C									
ATOM	1576	CG	PHE	A1168	18.402	26.965	32.723	1.00	20.24
C									
ATOM	1577	CD1	PHE	A1168	18.062	25.711	33.213	1.00	20.78
C									
ATOM	1578	CD2	PHE	A1168	17.976	27.321	31.445	1.00	20.98
C									
ATOM	1579	CE1	PHE	A1168	17.301	24.823	32.442	1.00	19.86
C									
ATOM	1580	CE2	PHE	A1168	17.215	26.436	30.666	1.00	20.47
C									
ATOM	1581	CZ	PHE	A1168	16.880	25.194	31.169	1.00	21.49
C									
ATOM	1582	N	GLY	A1169	21.664	28.592	31.680	1.00	18.86
N									
ATOM	1583	CA	GLY	A1169	22.287	28.559	30.368	1.00	17.80
C									
ATOM	1584	C	GLY	A1169	23.582	27.772	30.434	1.00	19.15
C									
ATOM	1585	O	GLY	A1169	23.900	26.983	29.538	1.00	19.60
O									
ATOM	1586	N	VAL	A1170	24.342	27.972	31.505	1.00	18.68
N									
ATOM	1587	CA	VAL	A1170	25.598	27.246	31.639	1.00	20.58
C									
ATOM	1588	C	VAL	A1170	25.339	25.751	31.808	1.00	20.77
C									
ATOM	1589	O	VAL	A1170	26.080	24.924	31.269	1.00	20.63
O									
ATOM	1590	CB	VAL	A1170	26.426	27.768	32.817	1.00	20.58
C									
ATOM	1591	CG1	VAL	A1170	27.751	26.993	32.898	1.00	21.16
C									
ATOM	1592	CG2	VAL	A1170	26.707	29.265	32.615	1.00	19.95
C									
ATOM	1593	N	VAL	A1171	24.288	25.406	32.548	1.00	20.40
N									
ATOM	1594	CA	VAL	A1171	23.944	24.000	32.756	1.00	19.79
C									
ATOM	1595	C	VAL	A1171	23.602	23.363	31.405	1.00	20.48
C									
ATOM	1596	O	VAL	A1171	23.968	22.219	31.147	1.00	21.21
O									
ATOM	1597	CB	VAL	A1171	22.761	23.851	33.741	1.00	19.08
C									
ATOM	1598	CG1	VAL	A1171	22.314	22.394	33.827	1.00	19.15
C									
ATOM	1599	CG2	VAL	A1171	23.178	24.338	35.117	1.00	17.80
C									
ATOM	1600	N	LEU	A1172	22.905	24.100	30.542	1.00	21.04
N									
ATOM	1601	CA	LEU	A1172	22.575	23.583	29.216	1.00	21.60
C									
ATOM	1602	C	LEU	A1172	23.879	23.289	28.475	1.00	21.76
C									
ATOM	1603	O	LEU	A1172	24.012	22.258	27.818	1.00	21.18
O									
ATOM	1604	CB	LEU	A1172	21.752	24.597	28.415	1.00	22.42

C									
ATOM	1605	CG	LEU	A1172	20.328	24.868	28.907	1.00	20.90
C									
ATOM	1606	CD1	LEU	A1172	19.589	25.707	27.873	1.00	21.75
C									
ATOM	1607	CD2	LEU	A1172	19.602	23.543	29.125	1.00	23.30
C									
ATOM	1608	N	TRP	A1173	24.839	24.201	28.585	1.00	22.28
N									
ATOM	1609	CA	TRP	A1173	26.139	24.015	27.938	1.00	23.36
C									
ATOM	1610	C	TRP	A1173	26.803	22.747	28.498	1.00	22.64
C									
ATOM	1611	O	TRP	A1173	27.355	21.940	27.755	1.00	24.20
O									
ATOM	1612	CB	TRP	A1173	27.038	25.222	28.208	1.00	22.87
C									
ATOM	1613	CG	TRP	A1173	28.352	25.200	27.464	1.00	24.86
C									
ATOM	1614	CD1	TRP	A1173	28.586	25.652	26.193	1.00	25.62
C									
ATOM	1615	CD2	TRP	A1173	29.610	24.718	27.954	1.00	25.24
C									
ATOM	1616	NE1	TRP	A1173	29.911	25.488	25.866	1.00	24.24
N									
ATOM	1617	CE2	TRP	A1173	30.562	24.918	26.927	1.00	26.69
C									
ATOM	1618	CE3	TRP	A1173	30.026	24.142	29.161	1.00	26.90
C									
ATOM	1619	CZ2	TRP	A1173	31.911	24.556	27.072	1.00	26.56
C									
ATOM	1620	CZ3	TRP	A1173	31.365	23.785	29.305	1.00	26.67
C									
ATOM	1621	CH2	TRP	A1173	32.291	23.995	28.265	1.00	26.69
C									
ATOM	1622	N	GLU	A1174	26.745	22.572	29.813	1.00	22.84
N									
ATOM	1623	CA	GLU	A1174	27.343	21.400	30.438	1.00	22.69
C									
ATOM	1624	C	GLU	A1174	26.702	20.125	29.899	1.00	23.15
C									
ATOM	1625	O	GLU	A1174	27.375	19.121	29.666	1.00	21.87
O									
ATOM	1626	CB	GLU	A1174	27.163	21.453	31.952	1.00	23.39
C									
ATOM	1627	CG	GLU	A1174	28.076	22.433	32.671	1.00	23.69
C									
ATOM	1628	CD	GLU	A1174	27.889	22.369	34.175	1.00	24.63
C									
ATOM	1629	OE1	GLU	A1174	26.871	22.901	34.670	1.00	23.59
O									
ATOM	1630	OE2	GLU	A1174	28.753	21.774	34.861	1.00	24.00
O									
ATOM	1631	N	ILE	A1175	25.393	20.164	29.702	1.00	22.76
N									
ATOM	1632	CA	ILE	A1175	24.698	18.997	29.182	1.00	24.36
C									
ATOM	1633	C	ILE	A1175	25.169	18.670	27.761	1.00	24.95
C									
ATOM	1634	O	ILE	A1175	25.516	17.530	27.469	1.00	25.29

O									
ATOM	1635	CB	ILE	A1175	23.179	19.227	29.190	1.00	23.89
C									
ATOM	1636	CG1	ILE	A1175	22.688	19.292	30.640	1.00	23.04
C									
ATOM	1637	CG2	ILE	A1175	22.474	18.136	28.387	1.00	24.11
C									
ATOM	1638	CD1	ILE	A1175	21.185	19.531	30.788	1.00	23.37
C									
ATOM	1639	N	ALA	A1176	25.186	19.675	26.889	1.00	25.64
N									
ATOM	1640	CA	ALA	A1176	25.600	19.482	25.498	1.00	26.86
C									
ATOM	1641	C	ALA	A1176	27.072	19.112	25.299	1.00	27.84
C									
ATOM	1642	O	ALA	A1176	27.424	18.578	24.253	1.00	28.96
O									
ATOM	1643	CB	ALA	A1176	25.275	20.727	24.675	1.00	25.07
C									
ATOM	1644	N	THR	A1177	27.926	19.397	26.283	1.00	27.35
N									
ATOM	1645	CA	THR	A1177	29.351	19.071	26.173	1.00	29.06
C									
ATOM	1646	C	THR	A1177	29.733	17.883	27.055	1.00	29.00
C									
ATOM	1647	O	THR	A1177	30.912	17.544	27.165	1.00	28.67
O									
ATOM	1648	CB	THR	A1177	30.253	20.254	26.611	1.00	28.15
C									
ATOM	1649	OG1	THR	A1177	29.969	20.582	27.977	1.00	29.36
O									
ATOM	1650	CG2	THR	A1177	30.017	21.477	25.739	1.00	28.44
C									
ATOM	1651	N	LEU	A1178	28.741	17.256	27.681	1.00	30.07
N									
ATOM	1652	CA	LEU	A1178	28.992	16.133	28.580	1.00	30.49
C									
ATOM	1653	C	LEU	A1178	29.897	16.558	29.729	1.00	30.81
C									
ATOM	1654	O	LEU	A1178	30.914	15.919	30.017	1.00	31.06
O									
ATOM	1655	CB	LEU	A1178	29.615	14.948	27.832	1.00	30.85
C									
ATOM	1656	CG	LEU	A1178	28.714	14.291	26.781	1.00	32.12
C									
ATOM	1657	CD1	LEU	A1178	29.386	13.028	26.256	1.00	31.80
C									
ATOM	1658	CD2	LEU	A1178	27.355	13.946	27.397	1.00	31.79
C									
ATOM	1659	N	ALA	A1179	29.506	17.652	30.375	1.00	30.26
N									
ATOM	1660	CA	ALA	A1179	30.207	18.208	31.525	1.00	30.16
C									
ATOM	1661	C	ALA	A1179	31.652	18.639	31.321	1.00	31.33
C									
ATOM	1662	O	ALA	A1179	32.527	18.283	32.107	1.00	30.33
O									
ATOM	1663	CB	ALA	A1179	30.125	17.240	32.706	1.00	30.30
C									
ATOM	1664	N	GLU	A1180	31.908	19.407	30.271	1.00	32.25

N									
ATOM	1665	CA	GLU A1180	33.255	19.910	30.052	1.00	34.21	
C									
ATOM	1666	C	GLU A1180	33.341	21.026	31.088	1.00	33.67	
C									
ATOM	1667	O	GLU A1180	32.311	21.503	31.556	1.00	33.21	
O									
ATOM	1668	CB	GLU A1180	33.393	20.495	28.642	1.00	36.10	
C									
ATOM	1669	CG	GLU A1180	34.828	20.573	28.148	1.00	40.32	
C									
ATOM	1670	CD	GLU A1180	35.426	19.194	27.924	1.00	41.89	
C									
ATOM	1671	OE1	GLU A1180	34.966	18.495	26.995	1.00	43.51	
O									
ATOM	1672	OE2	GLU A1180	36.343	18.803	28.680	1.00	43.58	
O									
ATOM	1673	N	GLN A1181	34.545	21.440	31.460	1.00	33.14	
N									
ATOM	1674	CA	GLN A1181	34.682	22.519	32.432	1.00	34.15	
C									
ATOM	1675	C	GLN A1181	34.403	23.839	31.717	1.00	33.39	
C									
ATOM	1676	O	GLN A1181	34.995	24.117	30.668	1.00	32.59	
O									
ATOM	1677	CB	GLN A1181	36.098	22.541	33.009	1.00	36.27	
C									
ATOM	1678	CG	GLN A1181	36.380	23.736	33.907	1.00	40.12	
C									
ATOM	1679	CD	GLN A1181	35.654	23.659	35.237	1.00	42.74	
C									
ATOM	1680	OE1	GLN A1181	35.803	24.537	36.089	1.00	45.31	
O									
ATOM	1681	NE2	GLN A1181	34.868	22.602	35.427	1.00	43.77	
N									
ATOM	1682	N	PRO A1182	33.490	24.665	32.260	1.00	32.32	
N									
ATOM	1683	CA	PRO A1182	33.181	25.947	31.616	1.00	31.77	
C									
ATOM	1684	C	PRO A1182	34.419	26.837	31.529	1.00	31.38	
C									
ATOM	1685	O	PRO A1182	35.154	26.976	32.502	1.00	31.14	
O									
ATOM	1686	CB	PRO A1182	32.115	26.548	32.530	1.00	31.59	
C									
ATOM	1687	CG	PRO A1182	31.445	25.341	33.117	1.00	32.69	
C									
ATOM	1688	CD	PRO A1182	32.617	24.443	33.426	1.00	32.06	
C									
ATOM	1689	N	TYR A1183	34.640	27.434	30.361	1.00	31.71	
N									
ATOM	1690	CA	TYR A1183	35.784	28.319	30.145	1.00	32.02	
C									
ATOM	1691	C	TYR A1183	37.086	27.585	30.455	1.00	33.65	
C									
ATOM	1692	O	TYR A1183	37.983	28.130	31.105	1.00	33.43	
O									
ATOM	1693	CB	TYR A1183	35.674	29.558	31.038	1.00	30.45	
C									
ATOM	1694	CG	TYR A1183	34.327	30.249	30.981	1.00	28.66	

C								
ATOM	1695	CD1	TYR	A1183	33.974	31.070	29.904	1.00 27.81
C								
ATOM	1696	CD2	TYR	A1183	33.396	30.066	32.004	1.00 27.87
C								
ATOM	1697	CE1	TYR	A1183	32.714	31.694	29.852	1.00 27.64
C								
ATOM	1698	CE2	TYR	A1183	32.145	30.680	31.964	1.00 27.39
C								
ATOM	1699	CZ	TYR	A1183	31.809	31.488	30.890	1.00 27.82
C								
ATOM	1700	OH	TYR	A1183	30.563	32.066	30.866	1.00 28.42
O								
ATOM	1701	N	GLN	A1184	37.182	26.347	29.987	1.00 35.15
N								
ATOM	1702	CA	GLN	A1184	38.369	25.535	30.210	1.00 38.12
C								
ATOM	1703	C	GLN	A1184	39.600	26.176	29.584	1.00 38.26
C								
ATOM	1704	O	GLN	A1184	39.595	26.542	28.410	1.00 37.98
O								
ATOM	1705	CB	GLN	A1184	38.160	24.140	29.626	1.00 40.97
C								
ATOM	1706	CG	GLN	A1184	39.376	23.239	29.725	1.00 45.31
C								
ATOM	1707	CD	GLN	A1184	39.004	21.771	29.655	1.00 48.16
C								
ATOM	1708	OE1	GLN	A1184	38.232	21.273	30.482	1.00 50.21
O								
ATOM	1709	NE2	GLN	A1184	39.547	21.067	28.666	1.00 49.52
N								
ATOM	1710	N	GLY	A1185	40.659	26.309	30.372	1.00 38.45
N								
ATOM	1711	CA	GLY	A1185	41.872	26.913	29.854	1.00 38.60
C								
ATOM	1712	C	GLY	A1185	42.040	28.331	30.361	1.00 38.43
C								
ATOM	1713	O	GLY	A1185	43.140	28.883	30.324	1.00 39.31
O								
ATOM	1714	N	LEU	A1186	40.948	28.929	30.829	1.00 37.69
N								
ATOM	1715	CA	LEU	A1186	40.998	30.284	31.360	1.00 36.66
C								
ATOM	1716	C	LEU	A1186	41.107	30.239	32.878	1.00 36.55
C								
ATOM	1717	O	LEU	A1186	40.409	29.466	33.535	1.00 36.44
O								
ATOM	1718	CB	LEU	A1186	39.741	31.071	30.971	1.00 36.43
C								
ATOM	1719	CG	LEU	A1186	39.601	31.533	29.520	1.00 36.99
C								
ATOM	1720	CD1	LEU	A1186	38.334	32.360	29.342	1.00 36.82
C								
ATOM	1721	CD2	LEU	A1186	40.807	32.366	29.158	1.00 38.03
C								
ATOM	1722	N	SER	A1187	41.986	31.062	33.436	1.00 35.34
N								
ATOM	1723	CA	SER	A1187	42.136	31.114	34.880	1.00 35.18
C								
ATOM	1724	C	SER	A1187	40.884	31.819	35.390	1.00 35.63

C								
ATOM	1725	O	SER A1187	40.159	32.439	34.608	1.00	35.88
O								
ATOM	1726	CB	SER A1187	43.366	31.933	35.261	1.00	34.55
C								
ATOM	1727	OG	SER A1187	43.177	33.283	34.890	1.00	32.41
O								
ATOM	1728	N	ASN A1188	40.630	31.730	36.689	1.00	34.98
N								
ATOM	1729	CA	ASN A1188	39.455	32.370	37.262	1.00	35.62
C								
ATOM	1730	C	ASN A1188	39.439	33.855	36.910	1.00	35.61
C								
ATOM	1731	O	ASN A1188	38.384	34.431	36.641	1.00	34.31
O								
ATOM	1732	CB	ASN A1188	39.437	32.181	38.781	1.00	34.56
C								
ATOM	1733	CG	ASN A1188	39.387	30.718	39.178	1.00	35.92
C								
ATOM	1734	OD1	ASN A1188	38.721	29.917	38.524	1.00	35.19
O								
ATOM	1735	ND2	ASN A1188	40.080	30.364	40.259	1.00	35.78
N								
ATOM	1736	N	GLU A1189	40.624	34.458	36.912	1.00	36.09
N								
ATOM	1737	CA	GLU A1189	40.788	35.871	36.592	1.00	36.71
C								
ATOM	1738	C	GLU A1189	40.323	36.206	35.185	1.00	35.48
C								
ATOM	1739	O	GLU A1189	39.588	37.171	34.976	1.00	35.09
O								
ATOM	1740	CB	GLU A1189	42.257	36.273	36.732	1.00	39.67
C								
ATOM	1741	CG	GLU A1189	42.610	36.813	38.095	1.00	42.50
C								
ATOM	1742	CD	GLU A1189	41.675	37.927	38.505	1.00	44.59
C								
ATOM	1743	OE1	GLU A1189	41.312	38.743	37.626	1.00	44.64
O								
ATOM	1744	OE2	GLU A1189	41.309	37.987	39.699	1.00	45.54
O								
ATOM	1745	N	GLN A1190	40.765	35.405	34.223	1.00	33.88
N								
ATOM	1746	CA	GLN A1190	40.400	35.610	32.833	1.00	34.12
C								
ATOM	1747	C	GLN A1190	38.904	35.387	32.635	1.00	34.04
C								
ATOM	1748	O	GLN A1190	38.282	36.026	31.783	1.00	32.68
O								
ATOM	1749	CB	GLN A1190	41.200	34.662	31.934	1.00	34.86
C								
ATOM	1750	CG	GLN A1190	42.700	34.950	31.914	1.00	35.71
C								
ATOM	1751	CD	GLN A1190	43.482	33.904	31.150	1.00	36.69
C								
ATOM	1752	OE1	GLN A1190	43.489	32.727	31.518	1.00	37.31
O								
ATOM	1753	NE2	GLN A1190	44.147	34.325	30.078	1.00	35.94
N								
ATOM	1754	N	VAL A1191	38.327	34.478	33.420	1.00	33.55

N									
ATOM	1755	CA	VAL	A1191	36.898	34.204	33.318	1.00	32.93
C									
ATOM	1756	C	VAL	A1191	36.131	35.445	33.725	1.00	33.19
C									
ATOM	1757	O	VAL	A1191	35.226	35.885	33.019	1.00	33.68
O									
ATOM	1758	CB	VAL	A1191	36.475	33.031	34.226	1.00	32.45
C									
ATOM	1759	CG1	VAL	A1191	34.952	32.994	34.353	1.00	32.10
C									
ATOM	1760	CG2	VAL	A1191	36.981	31.723	33.637	1.00	30.99
C									
ATOM	1761	N	LEU	A1192	36.504	36.006	34.869	1.00	34.12
N									
ATOM	1762	CA	LEU	A1192	35.866	37.206	35.388	1.00	35.32
C									
ATOM	1763	C	LEU	A1192	35.866	38.311	34.332	1.00	35.55
C									
ATOM	1764	O	LEU	A1192	34.844	38.960	34.096	1.00	35.01
O									
ATOM	1765	CB	LEU	A1192	36.611	37.689	36.635	1.00	37.17
C									
ATOM	1766	CG	LEU	A1192	35.805	37.887	37.923	1.00	39.16
C									
ATOM	1767	CD1	LEU	A1192	34.719	38.927	37.692	1.00	40.74
C									
ATOM	1768	CD2	LEU	A1192	35.197	36.560	38.360	1.00	39.96
C									
ATOM	1769	N	ARG	A1193	37.015	38.515	33.695	1.00	35.01
N									
ATOM	1770	CA	ARG	A1193	37.152	39.549	32.673	1.00	35.31
C									
ATOM	1771	C	ARG	A1193	36.423	39.194	31.383	1.00	33.90
C									
ATOM	1772	O	ARG	A1193	35.741	40.029	30.797	1.00	33.16
O									
ATOM	1773	CB	ARG	A1193	38.631	39.789	32.355	1.00	36.67
C									
ATOM	1774	CG	ARG	A1193	39.470	40.165	33.560	1.00	39.06
C									
ATOM	1775	CD	ARG	A1193	40.921	40.385	33.162	1.00	41.64
C									
ATOM	1776	NE	ARG	A1193	41.783	40.580	34.323	1.00	43.71
N									
ATOM	1777	CZ	ARG	A1193	43.059	40.946	34.250	1.00	45.34
C									
ATOM	1778	NH1	ARG	A1193	43.625	41.161	33.067	1.00	45.29
N									
ATOM	1779	NH2	ARG	A1193	43.770	41.093	35.360	1.00	46.07
N									
ATOM	1780	N	PHE	A1194	36.580	37.951	30.944	1.00	32.63
N									
ATOM	1781	CA	PHE	A1194	35.950	37.481	29.718	1.00	32.35
C									
ATOM	1782	C	PHE	A1194	34.435	37.665	29.747	1.00	32.22
C									
ATOM	1783	O	PHE	A1194	33.846	38.211	28.809	1.00	31.58
O									
ATOM	1784	CB	PHE	A1194	36.273	35.999	29.500	1.00	31.66

C									
ATOM	1785	CG	PHE A1194	35.744	35.445	28.207	1.00	32.46	
C									
ATOM	1786	CD1	PHE A1194	36.161	35.971	26.984	1.00	31.29	
C									
ATOM	1787	CD2	PHE A1194	34.834	34.392	28.209	1.00	31.60	
C									
ATOM	1788	CE1	PHE A1194	35.682	35.457	25.786	1.00	31.74	
C									
ATOM	1789	CE2	PHE A1194	34.346	33.869	27.015	1.00	31.40	
C									
ATOM	1790	CZ	PHE A1194	34.771	34.401	25.799	1.00	32.67	
C									
ATOM	1791	N	VAL A1195	33.811	37.208	30.827	1.00	31.38	
N									
ATOM	1792	CA	VAL A1195	32.360	37.295	30.967	1.00	31.01	
C									
ATOM	1793	C	VAL A1195	31.830	38.713	31.175	1.00	31.46	
C									
ATOM	1794	O	VAL A1195	30.838	39.105	30.560	1.00	30.89	
O									
ATOM	1795	CB	VAL A1195	31.864	36.407	32.132	1.00	29.97	
C									
ATOM	1796	CG1	VAL A1195	30.363	36.585	32.322	1.00	29.10	
C									
ATOM	1797	CG2	VAL A1195	32.178	34.949	31.837	1.00	28.84	
C									
ATOM	1798	N	MET A1196	32.485	39.480	32.037	1.00	32.36	
N									
ATOM	1799	CA	MET A1196	32.037	40.837	32.302	1.00	34.20	
C									
ATOM	1800	C	MET A1196	32.186	41.746	31.092	1.00	34.32	
C									
ATOM	1801	O	MET A1196	31.535	42.783	31.008	1.00	34.68	
O									
ATOM	1802	CB	MET A1196	32.778	41.422	33.507	1.00	35.34	
C									
ATOM	1803	CG	MET A1196	32.141	41.045	34.836	1.00	36.88	
C									
ATOM	1804	SD	MET A1196	33.015	41.665	36.284	1.00	40.41	
S									
ATOM	1805	CE	MET A1196	32.869	43.439	36.046	1.00	41.79	
C									
ATOM	1806	N	GLU A1197	33.037	41.355	30.152	1.00	34.94	
N									
ATOM	1807	CA	GLU A1197	33.235	42.149	28.950	1.00	36.46	
C									
ATOM	1808	C	GLU A1197	32.321	41.723	27.805	1.00	35.47	
C									
ATOM	1809	O	GLU A1197	32.364	42.305	26.727	1.00	35.30	
O									
ATOM	1810	CB	GLU A1197	34.697	42.088	28.508	1.00	38.52	
C									
ATOM	1811	CG	GLU A1197	35.612	42.975	29.339	1.00	42.80	
C									
ATOM	1812	CD	GLU A1197	37.069	42.857	28.933	1.00	45.45	
C									
ATOM	1813	OE1	GLU A1197	37.362	42.972	27.723	1.00	48.18	
O									
ATOM	1814	OE2	GLU A1197	37.922	42.655	29.823	1.00	47.47	

O									
ATOM	1815	N	GLY A1198	31.490	40.710	28.038	1.00	34.57	
N									
ATOM	1816	CA	GLY A1198	30.573	40.267	26.999	1.00	32.04	
C									
ATOM	1817	C	GLY A1198	30.889	38.938	26.339	1.00	31.11	
C									
ATOM	1818	O	GLY A1198	30.192	38.530	25.410	1.00	31.81	
O									
ATOM	1819	N	GLY A1199	31.930	38.258	26.809	1.00	29.92	
N									
ATOM	1820	CA	GLY A1199	32.290	36.972	26.232	1.00	29.02	
C									
ATOM	1821	C	GLY A1199	31.331	35.869	26.644	1.00	28.59	
C									
ATOM	1822	O	GLY A1199	30.657	35.982	27.669	1.00	26.96	
O									
ATOM	1823	N	LEU A1200	31.276	34.804	25.845	1.00	29.10	
N									
ATOM	1824	CA	LEU A1200	30.391	33.667	26.107	1.00	29.42	
C									
ATOM	1825	C	LEU A1200	31.074	32.332	25.829	1.00	30.27	
C									
ATOM	1826	O	LEU A1200	32.061	32.263	25.094	1.00	29.94	
O									
ATOM	1827	CB	LEU A1200	29.147	33.745	25.213	1.00	29.18	
C									
ATOM	1828	CG	LEU A1200	28.255	34.985	25.288	1.00	29.96	
C									
ATOM	1829	CD1	LEU A1200	27.207	34.918	24.190	1.00	29.66	
C									
ATOM	1830	CD2	LEU A1200	27.611	35.072	26.663	1.00	28.31	
C									
ATOM	1831	N	LEU A1201	30.536	31.272	26.420	1.00	30.53	
N									
ATOM	1832	CA	LEU A1201	31.054	29.926	26.195	1.00	31.33	
C									
ATOM	1833	C	LEU A1201	30.753	29.609	24.731	1.00	33.51	
C									
ATOM	1834	O	LEU A1201	29.834	30.189	24.153	1.00	32.70	
O									
ATOM	1835	CB	LEU A1201	30.338	28.931	27.111	1.00	29.71	
C									
ATOM	1836	CG	LEU A1201	30.666	29.073	28.598	1.00	27.86	
C									
ATOM	1837	CD1	LEU A1201	29.534	28.518	29.447	1.00	27.69	
C									
ATOM	1838	CD2	LEU A1201	31.990	28.353	28.890	1.00	28.03	
C									
ATOM	1839	N	ASP A1202	31.516	28.699	24.128	1.00	36.00	
N									
ATOM	1840	CA	ASP A1202	31.299	28.360	22.725	1.00	37.82	
C									
ATOM	1841	C	ASP A1202	30.035	27.544	22.476	1.00	38.71	
C									
ATOM	1842	O	ASP A1202	29.352	27.120	23.408	1.00	38.16	
O									
ATOM	1843	CB	ASP A1202	32.502	27.597	22.151	1.00	39.73	
C									
ATOM	1844	CG	ASP A1202	32.713	26.238	22.812	1.00	42.66	

C								
ATOM	1845	OD1	ASP	A1202	31.734	25.650	23.324	1.00 43.54
O								
ATOM	1846	OD2	ASP	A1202	33.863	25.745	22.802	1.00 43.89
O								
ATOM	1847	N	LYS	A1203	29.735	27.334	21.200	1.00 39.24
N								
ATOM	1848	CA	LYS	A1203	28.577	26.556	20.798	1.00 40.74
C								
ATOM	1849	C	LYS	A1203	29.048	25.111	20.680	1.00 41.02
C								
ATOM	1850	O	LYS	A1203	29.826	24.775	19.785	1.00 40.89
O								
ATOM	1851	CB	LYS	A1203	28.052	27.059	19.451	1.00 42.04
C								
ATOM	1852	CG	LYS	A1203	27.666	28.535	19.458	1.00 43.47
C								
ATOM	1853	CD	LYS	A1203	27.251	29.015	18.068	1.00 45.47
C								
ATOM	1854	CE	LYS	A1203	26.832	30.483	18.099	1.00 46.18
C								
ATOM	1855	NZ	LYS	A1203	26.525	31.024	16.738	1.00 47.55
N								
ATOM	1856	N	PRO	A1204	28.590	24.238	21.593	1.00 40.85
N								
ATOM	1857	CA	PRO	A1204	28.983	22.827	21.576	1.00 41.16
C								
ATOM	1858	C	PRO	A1204	28.721	22.185	20.220	1.00 42.18
C								
ATOM	1859	O	PRO	A1204	27.693	22.440	19.591	1.00 41.48
O								
ATOM	1860	CB	PRO	A1204	28.114	22.216	22.674	1.00 41.00
C								
ATOM	1861	CG	PRO	A1204	27.901	23.360	23.620	1.00 40.26
C								
ATOM	1862	CD	PRO	A1204	27.618	24.493	22.669	1.00 39.94
C								
ATOM	1863	N	ASP	A1205	29.651	21.352	19.773	1.00 43.81
N								
ATOM	1864	CA	ASP	A1205	29.497	20.672	18.496	1.00 46.22
C								
ATOM	1865	C	ASP	A1205	28.286	19.750	18.526	1.00 46.55
C								
ATOM	1866	O	ASP	A1205	28.021	19.091	19.532	1.00 47.44
O								
ATOM	1867	CB	ASP	A1205	30.755	19.863	18.171	1.00 48.03
C								
ATOM	1868	CG	ASP	A1205	31.937	20.742	17.806	1.00 49.94
C								
ATOM	1869	OD1	ASP	A1205	31.861	21.438	16.769	1.00 51.31
O								
ATOM	1870	OD2	ASP	A1205	32.939	20.742	18.553	1.00 51.46
O								
ATOM	1871	N	ASN	A1206	27.551	19.713	17.422	1.00 46.56
N								
ATOM	1872	CA	ASN	A1206	26.375	18.859	17.307	1.00 47.20
C								
ATOM	1873	C	ASN	A1206	25.323	19.103	18.387	1.00 46.57
C								
ATOM	1874	O	ASN	A1206	24.619	18.179	18.791	1.00 47.30

O									
ATOM	1875	CB	ASN A1206	26.801	17.389	17.343	1.00	48.65	
C									
ATOM	1876	CG	ASN A1206	27.840	17.058	16.288	1.00	50.01	
C									
ATOM	1877	OD1	ASN A1206	28.431	15.977	16.302	1.00	51.30	
O									
ATOM	1878	ND2	ASN A1206	28.066	17.987	15.364	1.00	50.10	
N									
ATOM	1879	N	CYS A1207	25.214	20.340	18.857	1.00	45.44	
N									
ATOM	1880	CA	CYS A1207	24.226	20.665	19.879	1.00	43.21	
C									
ATOM	1881	C	CYS A1207	22.892	20.998	19.212	1.00	42.07	
C									
ATOM	1882	O	CYS A1207	22.852	21.667	18.182	1.00	41.48	
O									
ATOM	1883	CB	CYS A1207	24.695	21.864	20.711	1.00	42.90	
C									
ATOM	1884	SG	CYS A1207	23.540	22.385	22.012	1.00	40.80	
S									
ATOM	1885	N	PRO A1208	21.782	20.515	19.785	1.00	41.16	
N									
ATOM	1886	CA	PRO A1208	20.445	20.772	19.240	1.00	40.17	
C									
ATOM	1887	C	PRO A1208	20.184	22.275	19.118	1.00	39.10	
C									
ATOM	1888	O	PRO A1208	20.482	23.033	20.041	1.00	38.01	
O									
ATOM	1889	CB	PRO A1208	19.530	20.115	20.267	1.00	41.04	
C									
ATOM	1890	CG	PRO A1208	20.353	18.945	20.732	1.00	41.37	
C									
ATOM	1891	CD	PRO A1208	21.718	19.569	20.913	1.00	41.67	
C									
ATOM	1892	N	ASP A1209	19.631	22.701	17.984	1.00	38.15	
N									
ATOM	1893	CA	ASP A1209	19.348	24.118	17.764	1.00	37.21	
C									
ATOM	1894	C	ASP A1209	18.560	24.777	18.889	1.00	35.77	
C									
ATOM	1895	O	ASP A1209	18.852	25.911	19.260	1.00	35.30	
O									
ATOM	1896	CB	ASP A1209	18.603	24.330	16.440	1.00	37.83	
C									
ATOM	1897	CG	ASP A1209	19.509	24.181	15.233	1.00	39.14	
C									
ATOM	1898	OD1	ASP A1209	20.738	24.316	15.397	1.00	41.17	
O									
ATOM	1899	OD2	ASP A1209	18.997	23.946	14.120	1.00	40.41	
O									
ATOM	1900	N	MET A1210	17.564	24.081	19.432	1.00	34.61	
N									
ATOM	1901	CA	MET A1210	16.761	24.656	20.511	1.00	34.65	
C									
ATOM	1902	C	MET A1210	17.595	24.988	21.744	1.00	33.41	
C									
ATOM	1903	O	MET A1210	17.330	25.973	22.435	1.00	32.22	
O									
ATOM	1904	CB	MET A1210	15.622	23.715	20.912	1.00	36.25	

C								
ATOM	1905	CG	MET A1210	14.504	23.622	19.892	1.00	39.39
C								
ATOM	1906	SD	MET A1210	13.065	22.747	20.541	1.00	43.20
S								
ATOM	1907	CE	MET A1210	11.969	24.119	20.947	1.00	42.21
C								
ATOM	1908	N	LEU A1211	18.601	24.169	22.023	1.00	32.23
N								
ATOM	1909	CA	LEU A1211	19.454	24.420	23.177	1.00	32.42
C								
ATOM	1910	C	LEU A1211	20.426	25.565	22.897	1.00	31.06
C								
ATOM	1911	O	LEU A1211	20.749	26.340	23.793	1.00	30.39
O								
ATOM	1912	CB	LEU A1211	20.208	23.145	23.568	1.00	33.87
C								
ATOM	1913	CG	LEU A1211	19.297	22.014	24.059	1.00	35.27
C								
ATOM	1914	CD1	LEU A1211	20.142	20.834	24.497	1.00	36.95
C								
ATOM	1915	CD2	LEU A1211	18.440	22.499	25.214	1.00	34.89
C								
ATOM	1916	N	LEU A1212	20.891	25.681	21.657	1.00	30.08
N								
ATOM	1917	CA	LEU A1212	21.794	26.776	21.311	1.00	29.34
C								
ATOM	1918	C	LEU A1212	21.034	28.089	21.465	1.00	28.41
C								
ATOM	1919	O	LEU A1212	21.568	29.073	21.978	1.00	27.96
O								
ATOM	1920	CB	LEU A1212	22.290	26.640	19.866	1.00	30.52
C								
ATOM	1921	CG	LEU A1212	23.305	25.528	19.578	1.00	32.56
C								
ATOM	1922	CD1	LEU A1212	23.548	25.417	18.080	1.00	31.88
C								
ATOM	1923	CD2	LEU A1212	24.609	25.825	20.313	1.00	31.93
C								
ATOM	1924	N	GLU A1213	19.779	28.094	21.019	1.00	27.36
N								
ATOM	1925	CA	GLU A1213	18.944	29.288	21.099	1.00	26.61
C								
ATOM	1926	C	GLU A1213	18.624	29.621	22.554	1.00	25.99
C								
ATOM	1927	O	GLU A1213	18.670	30.782	22.947	1.00	26.32
O								
ATOM	1928	CB	GLU A1213	17.659	29.081	20.286	1.00	25.91
C								
ATOM	1929	CG	GLU A1213	16.638	30.210	20.361	1.00	25.41
C								
ATOM	1930	CD	GLU A1213	17.186	31.577	19.965	1.00	26.64
C								
ATOM	1931	OE1	GLU A1213	18.334	31.674	19.475	1.00	25.47
O								
ATOM	1932	OE2	GLU A1213	16.449	32.568	20.144	1.00	25.53
O								
ATOM	1933	N	LEU A1214	18.301	28.607	23.352	1.00	25.84
N								
ATOM	1934	CA	LEU A1214	18.008	28.832	24.768	1.00	24.94

C								
ATOM	1935	C	LEU A1214	19.241	29.441	25.431	1.00	24.53
C								
ATOM	1936	O	LEU A1214	19.137	30.376	26.232	1.00	23.74
O								
ATOM	1937	CB	LEU A1214	17.632	27.516	25.467	1.00	24.02
C								
ATOM	1938	CG	LEU A1214	16.222	26.992	25.184	1.00	26.60
C								
ATOM	1939	CD1	LEU A1214	15.978	25.709	25.965	1.00	26.30
C								
ATOM	1940	CD2	LEU A1214	15.192	28.050	25.575	1.00	25.76
C								
ATOM	1941	N	MET A1215	20.412	28.910	25.093	1.00	24.05
N								
ATOM	1942	CA	MET A1215	21.649	29.437	25.651	1.00	25.08
C								
ATOM	1943	C	MET A1215	21.785	30.904	25.277	1.00	24.95
C								
ATOM	1944	O	MET A1215	22.050	31.744	26.134	1.00	24.69
O								
ATOM	1945	CB	MET A1215	22.861	28.650	25.137	1.00	26.28
C								
ATOM	1946	CG	MET A1215	23.079	27.318	25.845	1.00	26.95
C								
ATOM	1947	SD	MET A1215	24.641	26.512	25.393	1.00	28.82
S								
ATOM	1948	CE	MET A1215	24.066	25.184	24.368	1.00	25.56
C								
ATOM	1949	N	ARG A1216	21.599	31.211	23.993	1.00	25.68
N								
ATOM	1950	CA	ARG A1216	21.696	32.587	23.520	1.00	25.60
C								
ATOM	1951	C	ARG A1216	20.780	33.496	24.336	1.00	25.17
C								
ATOM	1952	O	ARG A1216	21.164	34.603	24.714	1.00	24.03
O								
ATOM	1953	CB	ARG A1216	21.304	32.685	22.038	1.00	26.08
C								
ATOM	1954	CG	ARG A1216	21.494	34.092	21.456	1.00	28.88
C								
ATOM	1955	CD	ARG A1216	20.999	34.207	20.012	1.00	27.63
C								
ATOM	1956	NE	ARG A1216	19.544	34.192	19.938	1.00	29.46
N								
ATOM	1957	CZ	ARG A1216	18.765	35.208	20.286	1.00	30.06
C								
ATOM	1958	NH1	ARG A1216	19.296	36.340	20.728	1.00	32.37
N								
ATOM	1959	NH2	ARG A1216	17.448	35.090	20.204	1.00	31.76
N								
ATOM	1960	N	MET A1217	19.566	33.017	24.596	1.00	24.62
N								
ATOM	1961	CA	MET A1217	18.575	33.772	25.356	1.00	24.56
C								
ATOM	1962	C	MET A1217	18.991	33.937	26.820	1.00	23.69
C								
ATOM	1963	O	MET A1217	18.897	35.033	27.375	1.00	23.64
O								
ATOM	1964	CB	MET A1217	17.206	33.069	25.291	1.00	26.04

C									
ATOM	1965	CG	MET	A1217	16.579	32.968	23.890	1.00	28.51
C									
ATOM	1966	SD	MET	A1217	15.232	31.725	23.766	1.00	33.04
S									
ATOM	1967	CE	MET	A1217	13.860	32.567	24.621	1.00	32.84
C									
ATOM	1968	N	CYS	A1218	19.446	32.850	27.442	1.00	23.38
N									
ATOM	1969	CA	CYS	A1218	19.858	32.891	28.849	1.00	23.43
C									
ATOM	1970	C	CYS	A1218	21.089	33.743	29.071	1.00	23.69
C									
ATOM	1971	O	CYS	A1218	21.308	34.250	30.176	1.00	22.98
O									
ATOM	1972	CB	CYS	A1218	20.137	31.480	29.382	1.00	23.54
C									
ATOM	1973	SG	CYS	A1218	18.684	30.420	29.454	1.00	25.79
S									
ATOM	1974	N	TRP	A1219	21.894	33.902	28.023	1.00	23.19
N									
ATOM	1975	CA	TRP	A1219	23.114	34.684	28.143	1.00	23.68
C									
ATOM	1976	C	TRP	A1219	23.045	36.110	27.598	1.00	24.33
C									
ATOM	1977	O	TRP	A1219	24.054	36.659	27.152	1.00	23.35
O									
ATOM	1978	CB	TRP	A1219	24.288	33.947	27.499	1.00	22.27
C									
ATOM	1979	CG	TRP	A1219	24.613	32.640	28.160	1.00	22.76
C									
ATOM	1980	CD1	TRP	A1219	24.380	32.297	29.463	1.00	22.68
C									
ATOM	1981	CD2	TRP	A1219	25.258	31.514	27.556	1.00	23.13
C									
ATOM	1982	NE1	TRP	A1219	24.838	31.021	29.706	1.00	23.55
N									
ATOM	1983	CE2	TRP	A1219	25.383	30.519	28.553	1.00	24.41
C									
ATOM	1984	CE3	TRP	A1219	25.746	31.248	26.268	1.00	23.54
C									
ATOM	1985	CZ2	TRP	A1219	25.975	29.274	28.300	1.00	24.69
C									
ATOM	1986	CZ3	TRP	A1219	26.336	30.007	26.017	1.00	25.12
C									
ATOM	1987	CH2	TRP	A1219	26.443	29.037	27.033	1.00	23.61
C									
ATOM	1988	N	GLN	A1220	21.859	36.705	27.631	1.00	25.40
N									
ATOM	1989	CA	GLN	A1220	21.711	38.095	27.199	1.00	25.57
C									
ATOM	1990	C	GLN	A1220	22.449	38.898	28.266	1.00	26.10
C									
ATOM	1991	O	GLN	A1220	22.258	38.658	29.458	1.00	26.80
O									
ATOM	1992	CB	GLN	A1220	20.231	38.483	27.168	1.00	24.03
C									
ATOM	1993	CG	GLN	A1220	19.490	37.916	25.974	1.00	23.69
C									
ATOM	1994	CD	GLN	A1220	20.011	38.486	24.672	1.00	26.12

C									
ATOM	1995	OE1	GLN	A1220	19.894	39.689	24.421	1.00	25.83
O									
ATOM	1996	NE2	GLN	A1220	20.612	37.632	23.842	1.00	25.90
N									
ATOM	1997	N	TYR	A1221	23.293	39.841	27.860	1.00	26.78
N									
ATOM	1998	CA	TYR	A1221	24.043	40.623	28.841	1.00	27.48
C									
ATOM	1999	C	TYR	A1221	23.094	41.393	29.760	1.00	27.89
C									
ATOM	2000	O	TYR	A1221	23.331	41.534	30.960	1.00	27.30
O									
ATOM	2001	CB	TYR	A1221	24.981	41.604	28.137	1.00	27.98
C									
ATOM	2002	CG	TYR	A1221	26.073	42.125	29.037	1.00	28.11
C									
ATOM	2003	CD1	TYR	A1221	27.231	41.381	29.259	1.00	28.75
C									
ATOM	2004	CD2	TYR	A1221	25.941	43.350	29.689	1.00	29.08
C									
ATOM	2005	CE1	TYR	A1221	28.233	41.842	30.109	1.00	29.67
C									
ATOM	2006	CE2	TYR	A1221	26.936	43.821	30.542	1.00	30.30
C									
ATOM	2007	CZ	TYR	A1221	28.080	43.062	30.747	1.00	30.27
C									
ATOM	2008	OH	TYR	A1221	29.065	43.519	31.590	1.00	31.23
O									
ATOM	2009	N	ASN	A1222	22.014	41.893	29.176	1.00	28.43
N									
ATOM	2010	CA	ASN	A1222	21.017	42.652	29.916	1.00	28.57
C									
ATOM	2011	C	ASN	A1222	20.092	41.634	30.576	1.00	28.81
C									
ATOM	2012	O	ASN	A1222	19.325	40.958	29.897	1.00	28.32
O									
ATOM	2013	CB	ASN	A1222	20.247	43.540	28.936	1.00	29.64
C									
ATOM	2014	CG	ASN	A1222	19.158	44.346	29.600	1.00	30.31
C									
ATOM	2015	OD1	ASN	A1222	18.490	45.156	28.947	1.00	33.54
O									
ATOM	2016	ND2	ASN	A1222	18.964	44.137	30.893	1.00	28.43
N									
ATOM	2017	N	PRO	A1223	20.149	41.517	31.913	1.00	29.24
N									
ATOM	2018	CA	PRO	A1223	19.291	40.547	32.596	1.00	29.21
C									
ATOM	2019	C	PRO	A1223	17.822	40.617	32.226	1.00	29.78
C									
ATOM	2020	O	PRO	A1223	17.145	39.588	32.170	1.00	27.87
O									
ATOM	2021	CB	PRO	A1223	19.546	40.835	34.077	1.00	29.91
C									
ATOM	2022	CG	PRO	A1223	19.979	42.264	34.087	1.00	30.06
C									
ATOM	2023	CD	PRO	A1223	20.875	42.346	32.887	1.00	29.18
C									
ATOM	2024	N	LYS	A1224	17.336	41.830	31.969	1.00	29.51

N									
ATOM	2025	CA	LYS A1224	15.940	42.032	31.620	1.00	30.12	
C									
ATOM	2026	C	LYS A1224	15.603	41.442	30.253	1.00	30.43	
C									
ATOM	2027	O	LYS A1224	14.431	41.276	29.920	1.00	31.09	
O									
ATOM	2028	CB	LYS A1224	15.604	43.530	31.640	1.00	30.51	
C									
ATOM	2029	N	MET A1225	16.629	41.127	29.464	1.00	29.86	
N									
ATOM	2030	CA	MET A1225	16.418	40.550	28.139	1.00	29.89	
C									
ATOM	2031	C	MET A1225	16.343	39.027	28.192	1.00	29.07	
C									
ATOM	2032	O	MET A1225	15.973	38.378	27.217	1.00	28.07	
O									
ATOM	2033	CB	MET A1225	17.542	40.972	27.189	1.00	31.78	
C									
ATOM	2034	CG	MET A1225	17.511	42.441	26.790	1.00	34.00	
C									
ATOM	2035	SD	MET A1225	16.076	42.830	25.774	1.00	39.69	
S									
ATOM	2036	CE	MET A1225	15.115	43.856	26.901	1.00	38.38	
C									
ATOM	2037	N	ARG A1226	16.698	38.453	29.332	1.00	27.36	
N									
ATOM	2038	CA	ARG A1226	16.657	37.005	29.469	1.00	25.66	
C									
ATOM	2039	C	ARG A1226	15.236	36.527	29.695	1.00	25.25	
C									
ATOM	2040	O	ARG A1226	14.404	37.254	30.228	1.00	25.75	
O									
ATOM	2041	CB	ARG A1226	17.533	36.557	30.638	1.00	24.15	
C									
ATOM	2042	CG	ARG A1226	18.999	36.898	30.461	1.00	21.97	
C									
ATOM	2043	CD	ARG A1226	19.819	36.607	31.714	1.00	21.87	
C									
ATOM	2044	NE	ARG A1226	21.045	37.396	31.690	1.00	21.18	
N									
ATOM	2045	CZ	ARG A1226	21.680	37.841	32.771	1.00	21.83	
C									
ATOM	2046	NH1	ARG A1226	21.218	37.567	33.989	1.00	20.36	
N									
ATOM	2047	NH2	ARG A1226	22.748	38.615	32.627	1.00	22.05	
N									
ATOM	2048	N	PRO A1227	14.932	35.293	29.275	1.00	25.03	
N									
ATOM	2049	CA	PRO A1227	13.586	34.752	29.466	1.00	24.47	
C									
ATOM	2050	C	PRO A1227	13.457	34.295	30.916	1.00	25.04	
C									
ATOM	2051	O	PRO A1227	14.459	34.168	31.621	1.00	24.30	
O									
ATOM	2052	CB	PRO A1227	13.557	33.574	28.502	1.00	24.69	
C									
ATOM	2053	CG	PRO A1227	14.977	33.053	28.603	1.00	23.19	
C									
ATOM	2054	CD	PRO A1227	15.775	34.351	28.517	1.00	23.48	

C									
ATOM	2055	N	SER A1228	12.225	34.056	31.355	1.00	24.28	
N									
ATOM	2056	CA	SER A1228	11.971	33.569	32.709	1.00	23.53	
C									
ATOM	2057	C	SER A1228	11.936	32.060	32.553	1.00	22.77	
C									
ATOM	2058	O	SER A1228	11.834	31.559	31.432	1.00	23.50	
O									
ATOM	2059	CB	SER A1228	10.603	34.044	33.198	1.00	23.34	
C									
ATOM	2060	OG	SER A1228	9.590	33.413	32.437	1.00	24.24	
O									
ATOM	2061	N	PHE A1229	12.015	31.321	33.654	1.00	22.08	
N									
ATOM	2062	CA	PHE A1229	11.975	29.872	33.539	1.00	21.69	
C									
ATOM	2063	C	PHE A1229	10.647	29.409	32.942	1.00	22.19	
C									
ATOM	2064	O	PHE A1229	10.597	28.414	32.206	1.00	20.79	
O									
ATOM	2065	CB	PHE A1229	12.249	29.225	34.900	1.00	20.85	
C									
ATOM	2066	CG	PHE A1229	13.712	29.219	35.269	1.00	19.61	
C									
ATOM	2067	CD1	PHE A1229	14.620	28.477	34.523	1.00	18.45	
C									
ATOM	2068	CD2	PHE A1229	14.184	29.970	36.341	1.00	20.35	
C									
ATOM	2069	CE1	PHE A1229	15.972	28.482	34.834	1.00	18.37	
C									
ATOM	2070	CE2	PHE A1229	15.540	29.980	36.662	1.00	19.26	
C									
ATOM	2071	CZ	PHE A1229	16.437	29.235	35.907	1.00	17.48	
C									
ATOM	2072	N	LEU A1230	9.572	30.131	33.247	1.00	23.62	
N									
ATOM	2073	CA	LEU A1230	8.269	29.785	32.686	1.00	24.61	
C									
ATOM	2074	C	LEU A1230	8.312	29.981	31.172	1.00	24.68	
C									
ATOM	2075	O	LEU A1230	7.830	29.138	30.421	1.00	25.74	
O									
ATOM	2076	CB	LEU A1230	7.165	30.653	33.297	1.00	24.86	
C									
ATOM	2077	CG	LEU A1230	6.873	30.359	34.769	1.00	24.52	
C									
ATOM	2078	CD1	LEU A1230	5.808	31.330	35.291	1.00	26.64	
C									
ATOM	2079	CD2	LEU A1230	6.411	28.909	34.911	1.00	25.36	
C									
ATOM	2080	N	GLU A1231	8.889	31.089	30.721	1.00	25.85	
N									
ATOM	2081	CA	GLU A1231	8.992	31.342	29.283	1.00	26.93	
C									
ATOM	2082	C	GLU A1231	9.856	30.265	28.624	1.00	26.75	
C									
ATOM	2083	O	GLU A1231	9.584	29.836	27.499	1.00	27.76	
O									
ATOM	2084	CB	GLU A1231	9.579	32.734	29.020	1.00	28.66	

C									
ATOM	2085	CG	GLU A1231	8.700	33.861	29.559	1.00	32.64	
C									
ATOM	2086	CD	GLU A1231	9.271	35.248	29.309	1.00	33.20	
C									
ATOM	2087	OE1	GLU A1231	10.496	35.436	29.461	1.00	33.48	
O									
ATOM	2088	OE2	GLU A1231	8.486	36.161	28.976	1.00	36.08	
O									
ATOM	2089	N	ILE A1232	10.894	29.820	29.327	1.00	25.89	
N									
ATOM	2090	CA	ILE A1232	11.771	28.780	28.796	1.00	23.97	
C									
ATOM	2091	C	ILE A1232	10.991	27.480	28.605	1.00	24.30	
C									
ATOM	2092	O	ILE A1232	11.063	26.843	27.554	1.00	22.92	
O									
ATOM	2093	CB	ILE A1232	12.967	28.526	29.746	1.00	23.67	
C									
ATOM	2094	CG1	ILE A1232	13.957	29.697	29.647	1.00	23.41	
C									
ATOM	2095	CG2	ILE A1232	13.626	27.197	29.403	1.00	21.51	
C									
ATOM	2096	CD1	ILE A1232	15.007	29.734	30.739	1.00	23.55	
C									
ATOM	2097	N	ILE A1233	10.245	27.091	29.630	1.00	25.00	
N									
ATOM	2098	CA	ILE A1233	9.450	25.871	29.578	1.00	26.21	
C									
ATOM	2099	C	ILE A1233	8.410	25.974	28.466	1.00	27.62	
C									
ATOM	2100	O	ILE A1233	8.208	25.039	27.689	1.00	27.64	
O									
ATOM	2101	CB	ILE A1233	8.735	25.626	30.928	1.00	26.36	
C									
ATOM	2102	CG1	ILE A1233	9.777	25.322	32.009	1.00	25.34	
C									
ATOM	2103	CG2	ILE A1233	7.738	24.467	30.799	1.00	25.70	
C									
ATOM	2104	CD1	ILE A1233	9.232	25.372	33.414	1.00	24.91	
C									
ATOM	2105	N	SER A1234	7.755	27.125	28.399	1.00	28.85	
N									
ATOM	2106	CA	SER A1234	6.734	27.363	27.391	1.00	30.83	
C									
ATOM	2107	C	SER A1234	7.270	27.103	25.983	1.00	31.46	
C									
ATOM	2108	O	SER A1234	6.614	26.453	25.170	1.00	30.79	
O									
ATOM	2109	CB	SER A1234	6.243	28.803	27.498	1.00	30.85	
C									
ATOM	2110	OG	SER A1234	5.253	29.070	26.533	1.00	36.36	
O									
ATOM	2111	N	SER A1235	8.470	27.603	25.703	1.00	30.79	
N									
ATOM	2112	CA	SER A1235	9.066	27.446	24.381	1.00	31.12	
C									
ATOM	2113	C	SER A1235	9.444	26.023	23.976	1.00	30.72	
C									
ATOM	2114	O	SER A1235	9.570	25.740	22.786	1.00	31.73	

O									
ATOM	2115	CB	SER	A1235	10.301	28.344	24.252	1.00	30.68
C									
ATOM	2116	OG	SER	A1235	11.358	27.861	25.060	1.00	32.75
O									
ATOM	2117	N	ILE	A1236	9.626	25.125	24.941	1.00	29.62
N									
ATOM	2118	CA	ILE	A1236	10.006	23.748	24.618	1.00	29.15
C									
ATOM	2119	C	ILE	A1236	9.008	22.695	25.088	1.00	30.05
C									
ATOM	2120	O	ILE	A1236	9.264	21.502	24.961	1.00	29.14
O									
ATOM	2121	CB	ILE	A1236	11.374	23.380	25.248	1.00	29.37
C									
ATOM	2122	CG1	ILE	A1236	11.281	23.487	26.777	1.00	29.40
C									
ATOM	2123	CG2	ILE	A1236	12.466	24.290	24.701	1.00	28.70
C									
ATOM	2124	CD1	ILE	A1236	12.555	23.093	27.519	1.00	29.57
C									
ATOM	2125	N	LYS	A1237	7.879	23.131	25.628	1.00	31.86
N									
ATOM	2126	CA	LYS	A1237	6.881	22.207	26.157	1.00	34.62
C									
ATOM	2127	C	LYS	A1237	6.377	21.118	25.220	1.00	35.38
C									
ATOM	2128	O	LYS	A1237	6.024	20.027	25.677	1.00	36.10
O									
ATOM	2129	CB	LYS	A1237	5.690	22.987	26.713	1.00	35.75
C									
ATOM	2130	CG	LYS	A1237	4.982	23.865	25.706	1.00	37.84
C									
ATOM	2131	CD	LYS	A1237	3.859	24.619	26.386	1.00	39.51
C									
ATOM	2132	CE	LYS	A1237	3.277	25.688	25.483	1.00	41.71
C									
ATOM	2133	NZ	LYS	A1237	2.257	26.479	26.224	1.00	44.31
N									
ATOM	2134	N	GLU	A1238	6.339	21.392	23.919	1.00	35.40
N									
ATOM	2135	CA	GLU	A1238	5.861	20.388	22.977	1.00	35.84
C									
ATOM	2136	C	GLU	A1238	6.873	19.256	22.814	1.00	36.19
C									
ATOM	2137	O	GLU	A1238	6.537	18.179	22.319	1.00	37.25
O									
ATOM	2138	CB	GLU	A1238	5.562	21.029	21.617	1.00	35.09
C									
ATOM	2139	N	GLU	A1239	8.110	19.498	23.241	1.00	36.08
N									
ATOM	2140	CA	GLU	A1239	9.173	18.501	23.129	1.00	35.81
C									
ATOM	2141	C	GLU	A1239	9.297	17.632	24.376	1.00	35.66
C									
ATOM	2142	O	GLU	A1239	10.051	16.657	24.388	1.00	35.29
O									
ATOM	2143	CB	GLU	A1239	10.510	19.197	22.870	1.00	37.07
C									
ATOM	2144	CG	GLU	A1239	10.425	20.305	21.841	1.00	38.99

C									
ATOM	2145	CD	GLU	A1239	10.020	19.803	20.469	1.00	40.84
C									
ATOM	2146	OE1	GLU	A1239	9.413	20.590	19.710	1.00	42.64
O									
ATOM	2147	OE2	GLU	A1239	10.314	18.630	20.145	1.00	40.55
O									
ATOM	2148	N	MET	A1240	8.559	17.985	25.424	1.00	35.58
N									
ATOM	2149	CA	MET	A1240	8.601	17.228	26.675	1.00	35.95
C									
ATOM	2150	C	MET	A1240	7.781	15.938	26.588	1.00	37.40
C									
ATOM	2151	O	MET	A1240	6.808	15.866	25.836	1.00	38.23
O									
ATOM	2152	CB	MET	A1240	8.066	18.091	27.822	1.00	33.51
C									
ATOM	2153	CG	MET	A1240	8.839	19.385	28.056	1.00	31.62
C									
ATOM	2154	SD	MET	A1240	10.583	19.085	28.446	1.00	29.26
S									
ATOM	2155	CE	MET	A1240	10.442	18.390	30.070	1.00	29.87
C									
ATOM	2156	N	GLU	A1241	8.171	14.923	27.356	1.00	38.68
N									
ATOM	2157	CA	GLU	A1241	7.440	13.658	27.362	1.00	40.33
C									
ATOM	2158	C	GLU	A1241	6.023	13.902	27.878	1.00	40.09
C									
ATOM	2159	O	GLU	A1241	5.765	14.891	28.560	1.00	39.84
O									
ATOM	2160	CB	GLU	A1241	8.147	12.625	28.241	1.00	41.70
C									
ATOM	2161	CG	GLU	A1241	9.587	12.376	27.839	1.00	44.98
C									
ATOM	2162	CD	GLU	A1241	10.222	11.239	28.613	1.00	47.13
C									
ATOM	2163	OE1	GLU	A1241	9.838	11.025	29.782	1.00	48.69
O									
ATOM	2164	OE2	GLU	A1241	11.119	10.569	28.056	1.00	49.28
O									
ATOM	2165	N	PRO	A1242	5.086	12.994	27.557	1.00	40.03
N									
ATOM	2166	CA	PRO	A1242	3.682	13.094	27.968	1.00	39.72
C									
ATOM	2167	C	PRO	A1242	3.440	13.361	29.454	1.00	38.89
C									
ATOM	2168	O	PRO	A1242	2.685	14.266	29.817	1.00	38.63
O									
ATOM	2169	CB	PRO	A1242	3.099	11.749	27.528	1.00	39.66
C									
ATOM	2170	CG	PRO	A1242	3.936	11.396	26.333	1.00	40.44
C									
ATOM	2171	CD	PRO	A1242	5.319	11.742	26.813	1.00	40.20
C									
ATOM	2172	N	GLY	A1243	4.085	12.568	30.304	1.00	38.08
N									
ATOM	2173	CA	GLY	A1243	3.909	12.707	31.738	1.00	37.23
C									
ATOM	2174	C	GLY	A1243	4.357	14.008	32.380	1.00	36.38

C									
ATOM	2175	O	GLY	A1243	4.154	14.195	33.582	1.00	36.22
O									
ATOM	2176	N	PHE	A1244	4.960	14.903	31.601	1.00	35.38
N									
ATOM	2177	CA	PHE	A1244	5.426	16.181	32.134	1.00	34.51
C									
ATOM	2178	C	PHE	A1244	4.234	17.016	32.596	1.00	35.25
C									
ATOM	2179	O	PHE	A1244	4.302	17.720	33.605	1.00	33.57
O									
ATOM	2180	CB	PHE	A1244	6.206	16.953	31.062	1.00	33.30
C									
ATOM	2181	CG	PHE	A1244	6.821	18.235	31.559	1.00	30.43
C									
ATOM	2182	CD1	PHE	A1244	7.876	18.212	32.467	1.00	29.71
C									
ATOM	2183	CD2	PHE	A1244	6.337	19.468	31.129	1.00	30.80
C									
ATOM	2184	CE1	PHE	A1244	8.445	19.401	32.944	1.00	27.55
C									
ATOM	2185	CE2	PHE	A1244	6.900	20.664	31.599	1.00	30.08
C									
ATOM	2186	CZ	PHE	A1244	7.960	20.622	32.512	1.00	27.60
C									
ATOM	2187	N	ARG	A1245	3.142	16.927	31.849	1.00	36.28
N									
ATOM	2188	CA	ARG	A1245	1.930	17.673	32.159	1.00	38.25
C									
ATOM	2189	C	ARG	A1245	1.310	17.222	33.483	1.00	38.04
C									
ATOM	2190	O	ARG	A1245	0.634	17.994	34.156	1.00	38.57
O									
ATOM	2191	CB	ARG	A1245	0.921	17.495	31.018	1.00	41.21
C									
ATOM	2192	CG	ARG	A1245	1.568	17.569	29.630	1.00	44.94
C									
ATOM	2193	CD	ARG	A1245	0.582	17.345	28.477	1.00	47.83
C									
ATOM	2194	NE	ARG	A1245	-0.155	18.558	28.123	1.00	50.26
N									
ATOM	2195	CZ	ARG	A1245	-1.163	19.061	28.830	1.00	51.42
C									
ATOM	2196	NH1	ARG	A1245	-1.572	18.454	29.937	1.00	51.49
N									
ATOM	2197	NH2	ARG	A1245	-1.754	20.183	28.435	1.00	51.61
N									
ATOM	2198	N	GLU	A1246	1.554	15.971	33.854	1.00	38.27
N									
ATOM	2199	CA	GLU	A1246	0.999	15.407	35.080	1.00	38.26
C									
ATOM	2200	C	GLU	A1246	1.800	15.687	36.351	1.00	36.86
C									
ATOM	2201	O	GLU	A1246	1.226	15.821	37.431	1.00	37.18
O									
ATOM	2202	CB	GLU	A1246	0.849	13.891	34.926	1.00	40.55
C									
ATOM	2203	CG	GLU	A1246	-0.034	13.457	33.756	1.00	44.85
C									
ATOM	2204	CD	GLU	A1246	-0.045	11.947	33.554	1.00	46.95

C									
ATOM	2205	OE1	GLU	A1246	0.971	11.397	33.069	1.00	47.55
O									
ATOM	2206	OE2	GLU	A1246	-1.072	11.309	33.886	1.00	48.83
O									
ATOM	2207	N	VAL	A1247	3.120	15.776	36.229	1.00	34.12
N									
ATOM	2208	CA	VAL	A1247	3.966	15.989	37.399	1.00	32.43
C									
ATOM	2209	C	VAL	A1247	4.665	17.341	37.518	1.00	31.40
C									
ATOM	2210	O	VAL	A1247	5.228	17.656	38.567	1.00	32.16
O									
ATOM	2211	CB	VAL	A1247	5.063	14.921	37.463	1.00	32.30
C									
ATOM	2212	CG1	VAL	A1247	4.442	13.526	37.472	1.00	31.52
C									
ATOM	2213	CG2	VAL	A1247	6.001	15.089	36.275	1.00	32.05
C									
ATOM	2214	N	SER	A1248	4.631	18.140	36.461	1.00	29.37
N									
ATOM	2215	CA	SER	A1248	5.322	19.418	36.470	1.00	28.45
C									
ATOM	2216	C	SER	A1248	4.661	20.559	37.225	1.00	28.46
C									
ATOM	2217	O	SER	A1248	3.435	20.618	37.358	1.00	27.77
O									
ATOM	2218	CB	SER	A1248	5.576	19.878	35.034	1.00	28.85
C									
ATOM	2219	OG	SER	A1248	4.361	20.229	34.397	1.00	29.35
O									
ATOM	2220	N	PHE	A1249	5.491	21.470	37.726	1.00	26.51
N									
ATOM	2221	CA	PHE	A1249	4.978	22.651	38.410	1.00	26.75
C									
ATOM	2222	C	PHE	A1249	4.331	23.533	37.336	1.00	26.82
C									
ATOM	2223	O	PHE	A1249	3.327	24.214	37.582	1.00	27.57
O									
ATOM	2224	CB	PHE	A1249	6.117	23.428	39.070	1.00	24.98
C									
ATOM	2225	CG	PHE	A1249	5.774	24.859	39.379	1.00	26.52
C									
ATOM	2226	CD1	PHE	A1249	4.952	25.175	40.452	1.00	25.76
C									
ATOM	2227	CD2	PHE	A1249	6.270	25.892	38.589	1.00	25.81
C									
ATOM	2228	CE1	PHE	A1249	4.629	26.507	40.743	1.00	26.71
C									
ATOM	2229	CE2	PHE	A1249	5.953	27.220	38.871	1.00	26.73
C									
ATOM	2230	CZ	PHE	A1249	5.131	27.525	39.951	1.00	25.90
C									
ATOM	2231	N	TYR	A1250	4.920	23.509	36.143	1.00	25.68
N									
ATOM	2232	CA	TYR	A1250	4.432	24.305	35.022	1.00	26.44
C									
ATOM	2233	C	TYR	A1250	2.942	24.097	34.745	1.00	26.31
C									
ATOM	2234	O	TYR	A1250	2.197	25.060	34.624	1.00	25.05

O									
ATOM	2235	CB	TYR	A1250	5.222	23.977	33.750	1.00	26.67
C									
ATOM	2236	CG	TYR	A1250	4.863	24.856	32.573	1.00	28.60
C									
ATOM	2237	CD1	TYR	A1250	5.351	26.159	32.473	1.00	27.57
C									
ATOM	2238	CD2	TYR	A1250	3.996	24.396	31.577	1.00	28.82
C									
ATOM	2239	CE1	TYR	A1250	4.982	26.986	31.405	1.00	29.72
C									
ATOM	2240	CE2	TYR	A1250	3.619	25.214	30.511	1.00	29.09
C									
ATOM	2241	CZ	TYR	A1250	4.112	26.503	30.431	1.00	29.89
C									
ATOM	2242	OH	TYR	A1250	3.728	27.308	29.385	1.00	32.31
O									
ATOM	2243	N	TYR	A1251	2.513	22.844	34.642	1.00	27.48
N									
ATOM	2244	CA	TYR	A1251	1.107	22.552	34.359	1.00	29.90
C									
ATOM	2245	C	TYR	A1251	0.205	22.421	35.590	1.00	30.89
C									
ATOM	2246	O	TYR	A1251	-0.973	22.080	35.459	1.00	31.00
O									
ATOM	2247	CB	TYR	A1251	0.988	21.273	33.525	1.00	30.84
C									
ATOM	2248	CG	TYR	A1251	1.347	21.441	32.066	1.00	32.97
C									
ATOM	2249	CD1	TYR	A1251	2.590	21.036	31.575	1.00	33.92
C									
ATOM	2250	CD2	TYR	A1251	0.431	21.990	31.169	1.00	33.69
C									
ATOM	2251	CE1	TYR	A1251	2.910	21.168	30.213	1.00	34.66
C									
ATOM	2252	CE2	TYR	A1251	0.739	22.133	29.816	1.00	35.57
C									
ATOM	2253	CZ	TYR	A1251	1.975	21.718	29.344	1.00	35.59
C									
ATOM	2254	OH	TYR	A1251	2.258	21.849	28.003	1.00	36.47
O									
ATOM	2255	N	SER	A1252	0.749	22.688	36.776	1.00	30.78
N									
ATOM	2256	CA	SER	A1252	-0.028	22.581	38.006	1.00	31.50
C									
ATOM	2257	C	SER	A1252	-0.923	23.797	38.211	1.00	33.77
C									
ATOM	2258	O	SER	A1252	-0.703	24.856	37.622	1.00	32.63
O									
ATOM	2259	CB	SER	A1252	0.898	22.446	39.214	1.00	28.47
C									
ATOM	2260	OG	SER	A1252	1.443	23.708	39.556	1.00	25.98
O									
ATOM	2261	N	GLU	A1253	-1.936	23.648	39.057	1.00	38.13
N									
ATOM	2262	CA	GLU	A1253	-2.832	24.762	39.326	1.00	41.85
C									
ATOM	2263	C	GLU	A1253	-2.134	25.859	40.129	1.00	43.22
C									
ATOM	2264	O	GLU	A1253	-2.536	27.019	40.078	1.00	44.08

O ATOM C	2265	CB	GLU	A1253	-4.084	24.273	40.058	1.00	44.10
ATOM C	2266	CG	GLU	A1253	-5.021	23.471	39.169	1.00	47.20
ATOM C	2267	CD	GLU	A1253	-6.372	23.223	39.806	1.00	49.62
ATOM O	2268	OE1	GLU	A1253	-6.419	22.586	40.882	1.00	51.56
ATOM O	2269	OE2	GLU	A1253	-7.389	23.666	39.230	1.00	51.17
ATOM N	2270	N	GLU	A1254	-1.085	25.502	40.865	1.00	45.08
ATOM C	2271	CA	GLU	A1254	-0.363	26.500	41.650	1.00	47.25
ATOM C	2272	C	GLU	A1254	0.278	27.562	40.763	1.00	48.14
ATOM O	2273	O	GLU	A1254	0.554	28.673	41.219	1.00	48.85
ATOM C	2274	CB	GLU	A1254	0.716	25.848	42.522	1.00	48.10
ATOM C	2275	CG	GLU	A1254	0.174	25.151	43.756	1.00	49.67
ATOM C	2276	CD	GLU	A1254	0.017	23.658	43.565	1.00	51.38
ATOM O	2277	OE1	GLU	A1254	-0.521	23.235	42.515	1.00	51.36
ATOM O	2278	OE2	GLU	A1254	0.430	22.907	44.476	1.00	52.89
ATOM N	2279	N	ASN	A1255	0.514	27.221	39.499	1.00	48.72
ATOM C	2280	CA	ASN	A1255	1.115	28.161	38.560	1.00	49.06
ATOM C	2281	C	ASN	A1255	0.071	28.805	37.650	1.00	49.93
ATOM O	2282	O	ASN	A1255	-0.331	28.225	36.639	1.00	50.04
ATOM C	2283	CB	ASN	A1255	2.170	27.465	37.700	1.00	47.46
ATOM C	2284	CG	ASN	A1255	2.689	28.359	36.598	1.00	46.80
ATOM O	2285	OD1	ASN	A1255	3.088	29.495	36.848	1.00	45.76
ATOM N	2286	ND2	ASN	A1255	2.685	27.856	35.370	1.00	45.96
ATOM N	2287	N	LYS	A1256	-0.361	30.007	38.018	1.00	51.06
ATOM C	2288	CA	LYS	A1256	-1.358	30.739	37.241	1.00	51.71
ATOM C	2289	C	LYS	A1256	-1.141	32.241	37.380	1.00	51.87
ATOM O	2290	O	LYS	A1256	-0.266	32.607	38.194	1.00	52.38
ATOM C	2291	CB	LYS	A1256	-2.769	30.374	37.713	1.00	51.43
TER ATOM N	2292		LYS	A1256					
ATOM C	2293	N	GLY	B 6	39.036	24.284	41.107	1.00	40.82
ATOM C	2294	CA	GLY	B 6	37.941	24.473	42.100	1.00	40.78

ATOM C	2295	C	GLY	B	6	36.802	25.287	41.518	1.00	40.77
ATOM O	2296	O	GLY	B	6	37.032	26.231	40.762	1.00	41.04
ATOM N	2297	N	GLU	B	7	35.571	24.936	41.877	1.00	40.15
ATOM C	2298	CA	GLU	B	7	34.406	25.645	41.363	1.00	39.17
ATOM C	2299	C	GLU	B	7	34.047	26.896	42.152	1.00	37.83
ATOM O	2300	O	GLU	B	7	33.410	27.801	41.621	1.00	37.19
ATOM C	2301	CB	GLU	B	7	33.190	24.719	41.322	1.00	41.31
ATOM C	2302	CG	GLU	B	7	33.283	23.603	40.304	1.00	44.38
ATOM C	2303	CD	GLU	B	7	34.086	22.428	40.808	1.00	45.85
ATOM O	2304	OE1	GLU	B	7	33.692	21.853	41.845	1.00	48.19
ATOM O	2305	OE2	GLU	B	7	35.103	22.079	40.169	1.00	46.91
ATOM N	2306	N	TYR	B	8	34.444	26.948	43.418	1.00	35.85
ATOM C	2307	CA	TYR	B	8	34.138	28.111	44.236	1.00	35.08
ATOM C	2308	C	TYR	B	8	35.409	28.911	44.475	1.00	35.80
ATOM O	2309	O	TYR	B	8	36.367	28.421	45.071	1.00	36.07
ATOM C	2310	CB	TYR	B	8	33.491	27.679	45.551	1.00	32.23
ATOM C	2311	CG	TYR	B	8	32.208	26.906	45.331	1.00	30.79
ATOM C	2312	CD1	TYR	B	8	32.233	25.536	45.069	1.00	29.80
ATOM C	2313	CD2	TYR	B	8	30.972	27.556	45.325	1.00	29.27
ATOM C	2314	CE1	TYR	B	8	31.057	24.827	44.804	1.00	28.38
ATOM C	2315	CE2	TYR	B	8	29.791	26.858	45.059	1.00	28.51
ATOM C	2316	CZ	TYR	B	8	29.842	25.495	44.800	1.00	27.67
ATOM O	2317	OH	TYR	B	8	28.680	24.803	44.532	1.00	25.85
ATOM N	2318	N	VAL	B	9	35.396	30.148	43.994	1.00	35.98
ATOM C	2319	CA	VAL	B	9	36.537	31.048	44.079	1.00	36.82
ATOM C	2320	C	VAL	B	9	36.235	32.253	44.946	1.00	37.49
ATOM O	2321	O	VAL	B	9	35.115	32.757	44.956	1.00	36.73
ATOM C	2322	CB	VAL	B	9	36.920	31.565	42.674	1.00	37.23
ATOM C	2323	CG1	VAL	B	9	38.233	32.339	42.741	1.00	37.93
ATOM C	2324	CG2	VAL	B	9	37.015	30.404	41.701	1.00	35.96

ATOM N	2325	N	ASN	B	10	37.241	32.726	45.672	1.00	39.29
ATOM C	2326	CA	ASN	B	10	37.043	33.884	46.524	1.00	41.20
ATOM C	2327	C	ASN	B	10	36.815	35.125	45.668	1.00	41.65
ATOM O	2328	O	ASN	B	10	37.458	35.318	44.638	1.00	41.69
ATOM C	2329	CB	ASN	B	10	38.251	34.096	47.434	1.00	42.91
ATOM C	2330	CG	ASN	B	10	37.977	35.105	48.528	1.00	45.62
ATOM O	2331	OD1	ASN	B	10	37.842	36.305	48.268	1.00	47.21
ATOM N	2332	ND2	ASN	B	10	37.881	34.623	49.763	1.00	47.32
ATOM N	2333	N	ILE	B	11	35.883	35.960	46.106	1.00	42.19
ATOM C	2334	CA	ILE	B	11	35.550	37.189	45.408	1.00	43.33
ATOM C	2335	C	ILE	B	11	34.988	38.107	46.483	1.00	43.91
ATOM O	2336	O	ILE	B	11	34.255	37.661	47.366	1.00	44.07
ATOM C	2337	CB	ILE	B	11	34.498	36.927	44.289	1.00	43.84
ATOM C	2338	CG1	ILE	B	11	34.243	38.206	43.492	1.00	43.89
ATOM C	2339	CG2	ILE	B	11	33.202	36.414	44.897	1.00	43.79
ATOM C	2340	CD1	ILE	B	11	33.405	37.987	42.244	1.00	43.43
ATOM N	2341	N	GLU	B	12	35.331	39.385	46.419	1.00	44.77
ATOM C	2342	CA	GLU	B	12	34.872	40.324	47.431	1.00	45.90
ATOM C	2343	C	GLU	B	12	34.130	41.518	46.847	1.00	45.85
ATOM O	2344	O	GLU	B	12	34.518	42.055	45.813	1.00	46.02
ATOM C	2345	CB	GLU	B	12	36.073	40.815	48.238	1.00	46.73
ATOM C	2346	CG	GLU	B	12	35.720	41.604	49.482	1.00	48.46
ATOM C	2347	CD	GLU	B	12	36.952	42.170	50.153	1.00	49.29
ATOM O	2348	OE1	GLU	B	12	37.972	41.450	50.208	1.00	49.56
ATOM O	2349	OE2	GLU	B	12	36.901	43.325	50.626	1.00	50.18
ATOM N	2350	N	PHE	B	13	33.063	41.931	47.521	1.00	46.52
ATOM C	2351	CA	PHE	B	13	32.274	43.069	47.071	1.00	47.14
ATOM C	2352	C	PHE	B	13	32.220	44.169	48.132	1.00	47.84
ATOM O	2353	O	PHE	B	13	31.914	43.830	49.298	1.00	48.52
ATOM C	2354	CB	PHE	B	13	30.856	42.618	46.715	1.00	46.83

ATOM	2355	CG	PHE	B	13	30.811	41.516	45.692	1.00	46.45
C										
ATOM	2356	CD1	PHE	B	13	30.698	40.187	46.084	1.00	46.19
C										
ATOM	2357	CD2	PHE	B	13	30.910	41.808	44.336	1.00	46.29
C										
ATOM	2358	CE1	PHE	B	13	30.684	39.163	45.139	1.00	45.84
C										
ATOM	2359	CE2	PHE	B	13	30.898	40.791	43.385	1.00	45.77
C										
ATOM	2360	CZ	PHE	B	13	30.784	39.468	43.787	1.00	45.64
C										
TER	2361		PHE	B	13					
HETATM	2362	PG	ACP		300	28.187	20.375	47.993	1.00	90.63
P										
HETATM	2363	O1G	ACP		300	27.263	21.059	48.936	1.00	90.58
O										
HETATM	2364	O2G	ACP		300	29.614	20.704	48.227	1.00	90.46
O										
HETATM	2365	O3G	ACP		300	27.759	20.368	46.575	1.00	90.51
O										
HETATM	2366	PB	ACP		300	28.989	17.539	47.592	1.00	88.83
P										
HETATM	2367	O1B	ACP		300	29.314	17.993	46.216	1.00	88.99
O										
HETATM	2368	O2B	ACP		300	30.106	17.095	48.465	1.00	89.01
O										
HETATM	2369	C3B	ACP		300	28.121	18.761	48.386	1.00	89.61
C										
HETATM	2370	PA	ACP		300	26.836	16.029	48.383	1.00	84.52
P										
HETATM	2371	O1A	ACP		300	27.121	16.421	49.782	1.00	84.49
O										
HETATM	2372	O2A	ACP		300	25.591	16.500	47.731	1.00	84.46
O										
HETATM	2373	O3A	ACP		300	28.029	16.357	47.492	1.00	86.79
O										
HETATM	2374	O5*	ACP		300	26.834	14.426	48.328	1.00	82.72
O										
HETATM	2375	C5*	ACP		300	27.992	13.572	48.283	1.00	79.58
C										
HETATM	2376	C4*	ACP		300	27.603	12.316	47.539	1.00	77.81
C										
HETATM	2377	O4*	ACP		300	26.473	11.705	48.213	1.00	76.39
O										
HETATM	2378	C3*	ACP		300	27.130	12.537	46.110	1.00	77.47
C										
HETATM	2379	O3*	ACP		300	28.231	12.527	45.208	1.00	78.23
O										
HETATM	2380	C2*	ACP		300	26.209	11.347	45.874	1.00	76.55
C										
HETATM	2381	O2*	ACP		300	26.910	10.172	45.515	1.00	77.33
O										
HETATM	2382	C1*	ACP		300	25.572	11.174	47.255	1.00	75.12
C										
HETATM	2383	N9	ACP		300	24.276	11.839	47.415	1.00	72.80
N										
HETATM	2384	C8	ACP		300	24.015	13.074	47.962	1.00	72.08
C										
HETATM	2385	N7	ACP		300	22.741	13.386	47.982	1.00	71.07

N									
HETATM	2386	C5	ACP	300	22.118	12.287	47.406	1.00	70.69
C									
HETATM	2387	C6	ACP	300	20.766	11.996	47.133	1.00	69.98
C									
HETATM	2388	N6	ACP	300	19.753	12.819	47.426	1.00	68.35
N									
HETATM	2389	N1	ACP	300	20.485	10.812	46.547	1.00	69.31
N									
HETATM	2390	C2	ACP	300	21.497	9.986	46.254	1.00	70.12
C									
HETATM	2391	N3	ACP	300	22.804	10.144	46.460	1.00	70.45
N									
HETATM	2392	C4	ACP	300	23.052	11.329	47.045	1.00	71.44
C									
HETATM	2393	O	HOH	1	22.137	29.987	39.997	1.00	24.25
O									
HETATM	2394	O	HOH	2	28.502	21.379	37.559	1.00	17.51
O									
HETATM	2395	O	HOH	3	21.920	26.909	46.424	1.00	18.07
O									
HETATM	2396	O	HOH	4	25.752	30.702	40.361	1.00	25.78
O									
HETATM	2397	O	HOH	5	24.945	34.730	39.083	1.00	23.79
O									
HETATM	2398	O	HOH	6	29.279	31.851	33.168	1.00	21.31
O									
HETATM	2399	O	HOH	7	31.143	21.585	38.763	1.00	23.45
O									
HETATM	2400	O	HOH	8	26.341	38.277	27.657	1.00	25.42
O									
HETATM	2401	O	HOH	9	14.537	38.179	41.151	1.00	28.18
O									
HETATM	2402	O	HOH	10	9.520	12.415	36.226	1.00	25.47
O									
HETATM	2403	O	HOH	11	21.571	33.423	40.575	1.00	26.47
O									
HETATM	2404	O	HOH	12	9.808	31.932	36.081	1.00	24.12
O									
HETATM	2405	O	HOH	13	10.251	18.911	46.584	1.00	20.34
O									
HETATM	2406	O	HOH	14	29.036	37.929	28.766	1.00	23.81
O									
HETATM	2407	O	HOH	15	13.398	8.179	48.098	1.00	24.75
O									
HETATM	2408	O	HOH	16	10.832	15.265	44.323	1.00	21.60
O									
HETATM	2409	O	HOH	17	15.665	13.459	32.157	1.00	28.24
O									
HETATM	2410	O	HOH	18	26.572	27.947	40.217	1.00	21.83
O									
HETATM	2411	O	HOH	19	23.836	32.387	39.546	1.00	20.61
O									
HETATM	2412	O	HOH	20	30.537	33.584	34.558	1.00	27.88
O									
HETATM	2413	O	HOH	21	28.581	31.986	28.493	1.00	25.64
O									
HETATM	2414	O	HOH	22	9.993	14.732	34.653	1.00	22.34
O									
HETATM	2415	O	HOH	23	14.882	12.725	66.433	1.00	30.60

O									
HETATM	2416	O	HOH	24	14.789	38.625	32.433	1.00	34.28
O									
HETATM	2417	O	HOH	25	25.435	26.484	53.022	1.00	31.27
O									
HETATM	2418	O	HOH	26	30.141	16.575	40.620	1.00	33.77
O									
HETATM	2419	O	HOH	27	36.625	28.028	38.866	1.00	28.39
O									
HETATM	2420	O	HOH	28	31.749	25.342	67.897	1.00	30.69
O									
HETATM	2421	O	HOH	29	14.812	35.957	33.696	1.00	30.39
O									
HETATM	2422	O	HOH	30	16.288	7.376	42.312	1.00	23.93
O									
HETATM	2423	O	HOH	31	1.206	19.282	36.921	1.00	26.84
O									
HETATM	2424	O	HOH	32	8.011	14.500	32.548	1.00	42.67
O									
HETATM	2425	O	HOH	33	26.860	11.491	42.483	1.00	36.55
O									
HETATM	2426	O	HOH	34	16.020	10.404	67.594	1.00	31.11
O									
HETATM	2427	O	HOH	35	21.459	41.899	26.285	1.00	29.09
O									
HETATM	2428	O	HOH	36	18.492	9.954	68.741	1.00	33.40
O									
HETATM	2429	O	HOH	37	6.597	16.223	56.219	1.00	52.42
O									
HETATM	2430	O	HOH	38	-2.101	20.541	39.799	1.00	31.64
O									
HETATM	2431	O	HOH	39	12.508	32.800	36.316	1.00	25.89
O									
HETATM	2432	O	HOH	40	8.498	30.990	38.113	1.00	25.67
O									
HETATM	2433	O	HOH	41	15.184	18.895	68.516	1.00	40.91
O									
HETATM	2434	O	HOH	42	33.849	28.516	39.086	1.00	22.93
O									
HETATM	2435	O	HOH	43	7.785	5.814	54.761	1.00	35.37
O									
HETATM	2436	O	HOH	44	19.506	45.472	25.833	1.00	30.04
O									
HETATM	2437	O	HOH	45	17.722	8.373	29.609	1.00	39.92
O									
HETATM	2438	O	HOH	47	5.664	19.223	40.690	1.00	30.95
O									
HETATM	2439	O	HOH	48	43.007	33.486	38.592	1.00	36.20
O									
HETATM	2440	O	HOH	49	12.056	38.191	39.710	1.00	37.31
O									
HETATM	2441	O	HOH	50	12.933	6.960	39.622	1.00	34.19
O									
HETATM	2442	O	HOH	51	36.441	34.000	51.717	1.00	74.17
O									
HETATM	2443	O	HOH	52	21.443	15.806	66.124	1.00	38.62
O									
HETATM	2444	O	HOH	53	13.432	24.781	60.537	1.00	41.23
O									
HETATM	2445	O	HOH	54	13.350	35.437	35.840	1.00	29.54

O									
HETATM	2446	O	HOH	55	4.164	19.389	27.476	1.00	41.74
O									
HETATM	2447	O	HOH	56	31.249	20.911	34.186	1.00	27.10
O									
HETATM	2448	O	HOH	57	19.746	28.049	17.447	1.00	39.48
O									
HETATM	2449	O	HOH	58	42.843	30.393	38.039	1.00	47.83
O									
HETATM	2450	O	HOH	59	31.592	27.673	64.845	1.00	43.83
O									
HETATM	2451	O	HOH	60	12.318	19.740	48.429	1.00	38.12
O									
HETATM	2452	O	HOH	61	12.451	8.944	41.374	1.00	40.43
O									
HETATM	2453	O	HOH	62	4.219	26.852	44.487	1.00	38.88
O									
HETATM	2454	O	HOH	63	26.219	10.703	38.752	1.00	28.12
O									
HETATM	2455	O	HOH	64	7.405	34.791	33.154	1.00	34.07
O									
HETATM	2456	O	HOH	65	11.515	26.327	56.838	1.00	31.08
O									
HETATM	2457	O	HOH	66	17.297	33.563	52.871	1.00	43.41
O									
HETATM	2458	O	HOH	67	24.267	8.457	44.546	1.00	38.80
O									
HETATM	2459	O	HOH	69	11.432	4.072	48.149	1.00	35.05
O									
HETATM	2460	O	HOH	70	10.772	11.020	40.667	1.00	37.02
O									
HETATM	2461	O	HOH	71	24.997	3.953	44.283	1.00	43.64
O									
HETATM	2462	O	HOH	72	23.451	6.060	35.463	1.00	45.73
O									
HETATM	2463	O	HOH	73	32.220	14.620	38.020	1.00	37.33
O									
HETATM	2464	O	HOH	74	13.693	1.406	44.713	1.00	48.16
O									
HETATM	2465	O	HOH	75	22.511	6.538	30.501	1.00	42.94
O									
HETATM	2466	O	HOH	76	24.836	42.218	33.193	1.00	32.38
O									
HETATM	2467	O	HOH	77	25.981	28.233	22.712	1.00	29.46
O									
HETATM	2468	O	HOH	78	32.320	22.917	23.374	1.00	48.86
O									
HETATM	2469	O	HOH	79	16.510	12.998	29.553	1.00	34.25
O									
HETATM	2470	O	HOH	80	45.514	30.182	32.390	1.00	44.39
O									
HETATM	2471	O	HOH	81	18.649	0.766	42.899	1.00	47.59
O									
HETATM	2472	O	HOH	82	26.554	14.855	54.851	1.00	30.76
O									
HETATM	2473	O	HOH	83	6.818	22.741	55.460	1.00	45.68
O									
HETATM	2474	O	HOH	84	24.057	29.805	21.544	1.00	35.34
O									
HETATM	2475	O	HOH	85	24.932	7.469	37.185	1.00	46.73

O									
HETATM	2476	O	HOH	86	27.606	30.708	22.713	1.00	35.85
O									
HETATM	2477	O	HOH	87	26.976	23.102	51.189	1.00	39.11
O									
HETATM	2478	O	HOH	88	9.637	10.018	38.354	1.00	35.11
O									
HETATM	2479	O	HOH	89	12.916	-4.328	51.504	1.00	45.03
O									
HETATM	2480	O	HOH	90	3.786	30.704	39.114	1.00	44.49
O									
HETATM	2481	O	HOH	91	18.854	11.664	32.681	1.00	40.60
O									
HETATM	2482	O	HOH	92	13.377	9.630	43.738	1.00	34.97
O									
HETATM	2483	O	HOH	93	26.928	29.602	60.404	1.00	49.22
O									
HETATM	2484	O	HOH	94	23.211	24.862	45.756	1.00	43.49
O									
HETATM	2485	O	HOH	95	24.506	23.885	52.760	1.00	42.23
O									
HETATM	2486	O	HOH	96	29.721	25.703	49.289	1.00	62.96
O									
HETATM	2487	O	HOH	97	26.929	17.398	53.963	1.00	53.66
O									
HETATM	2488	O	HOH	98	26.377	18.429	51.202	1.00	49.22
O									
HETATM	2489	O	HOH	99	31.721	19.360	40.533	1.00	37.77
O									
HETATM	2490	O	HOH	100	24.321	17.340	43.977	1.00	42.11
O									
HETATM	2491	O	HOH	101	24.964	20.989	50.603	1.00	63.81
O									
HETATM	2492	O	HOH	102	26.108	25.416	47.344	1.00	54.19
O									
HETATM	2493	O	HOH	103	23.111	26.758	54.643	1.00	39.22
O									
HETATM	2494	O	HOH	104	5.052	20.803	55.640	1.00	37.86
O									
HETATM	2495	O	HOH	105	11.313	19.059	50.627	1.00	33.05
O									
HETATM	2496	O	HOH	106	13.990	39.942	39.438	1.00	52.24
O									
HETATM	2497	O	HOH	107	27.194	32.974	49.723	1.00	31.57
O									
HETATM	2498	O	HOH	108	21.058	36.732	54.272	1.00	47.71
O									
HETATM	2499	O	HOH	109	18.121	1.998	49.995	1.00	29.42
O									
HETATM	2500	O	HOH	110	6.193	22.676	60.202	1.00	54.23
O									
HETATM	2501	O	HOH	111	16.261	21.710	17.961	1.00	55.38
O									
HETATM	2502	O	HOH	112	15.057	-4.883	50.272	1.00	39.14
O									
HETATM	2503	O	HOH	113	27.054	43.687	34.078	1.00	36.69
O									
HETATM	2504	O	HOH	114	12.294	11.767	33.039	1.00	35.68
O									
HETATM	2505	O	HOH	115	39.847	31.335	45.674	1.00	41.98

O									
HETATM	2506	O	HOH	116	15.067	21.595	67.590	1.00	37.18
O									
HETATM	2507	O	HOH	117	32.656	21.284	36.411	1.00	45.07
O									
HETATM	2508	O	HOH	118	20.381	40.057	37.939	1.00	41.60
O									
HETATM	2509	O	HOH	119	29.326	1.277	52.677	1.00	45.29
O									
HETATM	2510	O	HOH	164	25.927	18.489	45.653	1.00	60.51
O									
HETATM	2511	O	HOH	121	33.859	27.702	25.719	1.00	39.14
O									
HETATM	2512	O	HOH	122	16.017	3.348	34.593	1.00	39.15
O									
HETATM	2513	O	HOH	123	23.977	5.637	32.473	1.00	42.29
O									
HETATM	2514	O	HOH	124	23.155	30.578	18.925	1.00	43.77
O									
HETATM	2515	O	HOH	125	35.930	24.489	44.770	1.00	44.28
O									
HETATM	2516	O	HOH	126	25.217	31.856	22.671	1.00	37.23
O									
HETATM	2517	O	HOH	127	2.659	22.591	41.848	1.00	43.18
O									
HETATM	2518	O	HOH	128	27.050	30.876	62.822	1.00	43.57
O									
HETATM	2519	O	HOH	129	34.139	39.714	54.500	1.00	42.22
O									
HETATM	2520	O	HOH	130	9.664	22.256	61.236	1.00	43.83
O									
HETATM	2521	O	HOH	131	12.664	13.436	71.519	1.00	43.94
O									
HETATM	2522	O	HOH	132	20.327	41.282	49.889	1.00	45.31
O									
HETATM	2523	O	HOH	133	31.509	37.374	48.793	1.00	46.23
O									
HETATM	2524	O	HOH	134	9.354	13.811	58.712	1.00	43.10
O									
HETATM	2525	O	HOH	135	8.605	7.368	47.689	1.00	46.66
O									
HETATM	2526	O	HOH	136	5.029	33.683	31.890	1.00	48.57
O									
HETATM	2527	O	HOH	137	35.485	27.292	21.198	1.00	46.51
O									
HETATM	2528	O	HOH	138	8.022	34.150	35.973	1.00	46.38
O									
HETATM	2529	O	HOH	139	18.323	44.117	35.949	1.00	43.47
O									
HETATM	2530	O	HOH	140	12.199	3.278	45.740	1.00	43.53
O									
HETATM	2531	O	HOH	141	11.674	38.458	29.581	1.00	48.58
O									
HETATM	2532	O	HOH	142	21.078	19.793	55.157	1.00	41.59
O									
HETATM	2533	O	HOH	143	25.520	45.197	36.030	1.00	42.70
O									
HETATM	2534	O	HOH	144	24.067	-2.119	57.839	1.00	47.84
O									
HETATM	2535	O	HOH	145	13.817	1.093	42.142	1.00	45.12

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 HETATM 2538 O HOH 148 38.999 24.750 33.957 1.00 59.12
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 HETATM 2539 O HOH 149 18.797 11.077 71.789 1.00 37.85
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 HETATM 2540 O HOH 150 8.548 12.865 55.304 1.00 35.43
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 HETATM 2541 O HOH 151 4.308 6.026 56.071 1.00 49.56
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